

## Paper I

1. Evolution of public health and concepts of health
2. Environment and health
3. Health education
4. Nutrition and dietetics
5. Occupational health
6. Medical sociology and community mental health
7. Biostatistics
8. Basic epidemiology

## Paper II

1. Epidemiology of specific diseases communicable and noncommunicable diseases
2. Demography
3. Reproductive and child health, geriatrics
4. School health, urban health
5. Health system in India
6. Health planning and management including disaster management
7. International health

## Practical Examination

Practical examination will carry 80 marks.

Ten Spotters	10 marks
Two Problem Solving Exercises	35 marks
One Clinico-social Case Discussion	35 marks

## Viva Voce Examination

Viva voce carries 40 marks and encompasses all aspects of syllabus.

## CHAPTER 1 MAN AND MEDICINE: TOWARDS HEALTH FOR ALL

### Short Answers

1. List the Indian Systems of Medicine.	2	710	D09(RS2)
2. Add a note on father of medicine.	3	—	D11
3. John snow.	5	—	D10
4. What is the contribution to medical sciences by: (a) Robert Koch, (b) John Snow and (c) James Lind.	5-6	920	D10(RS2)
5. What are the contributions of Louis Pasteur to community medicine?	6	920	J05, J06
6. What has been the contribution of James Lind in community medicine?	6	—	D03
7. Contributions of Edward Jenner (to community medicine).	6	919	J04, D04, D12
8. What is contribution of Ronald Ross to public health?	6	921	J07
9. What is the contribution to medical sciences by: (a) Edward Jenner, (b) Ronald Ross and (c) Louis Pasteur.	6	919	J09
10. Social medicine.	8	3	J08(RS2)
11. What do you mean by "de-professionalization of medicine".	11	—	D13(RS3)

## CHAPTER 2

### CONCEPT OF HEALTH AND DISEASE

#### Long Essays

1. Define health. Describe in detail about indicators of health.	14, 24	6, 9	J15, D16
2. Justify the role of healthy life style in promotion of health. Give two examples of lifestyle factor that promote health and two examples that cause disease. Describe how can you influence lifestyle changes that promote health.	19, 49	8	D02
3. Enumerate the indicators of health and describe physical quality of life index.	24, 17	9, 7	D09



	24	9	J08(RS2)
4. How will you compare the health situation in two communities? What are the other uses of "indicators of health"?			
5. List the various indicators of health and describe three important indicators which directly assess ill health in the community.	24	9	J01
6. Enumerate the indicators of health. Describe all the mortality indicators with suitable examples. What are the methods of standardization the mortality rate?	24, 65	9, 218	D08
7. Describe the concept "natural history of disease" with the help of disease" with the help of a schematic diagram. Mention the levels of prevention and modes of intervention.	41, 47	12, 15	D07(RS2), J10(RS2), D14(RS3)
8. What do you understand by natural history of disease? Describe citing an examples of a disease, the types of interventions that are possible within its natural history.	41, 49	12, 15	J11
9. Explain the differences between disease control, elimination and eradication. Describe the activities under the National Pulse Polio Immunization Program.	46, 229	—, 786	J03
10. Describe the various levels of prevention in relation to natural history of disease and the modes of intervention with examples. Apply each level of prevention to the prevention of coronary heart disease/protein-energy malnutrition in a population.	47, 49	15	D09(RS2), J11(RS2), D12(RS3), D00, J01, J04, D04, D12, J13, J17
11. You are in-charge of a primary health center. How will you make a community diagnosis of the health situation in order to formulate intervention measures?	56	—	D08(RS2)
<b>Short Essays</b>			
1. "Tridosha theory".	—	11	D18(RS3)
2. Four criteria for causality.	—	233	J01
3. Explain the differences between disease control and eradication.	—	—	D00, J03

	18	8	J16(RS3), D08, J09
11. Determinants of health.			
12. "Life style" as etiology of diseases (describe lifestyles affecting our health).	19	8	J16(RS3), D08
13. How will you measure the health of a community?	24	216	J11
14. Disability indicators.	26	9	D08(RS2), J12(RS2), D13(RS3), D14(RS3), J17(RS3)
15. Health-care delivery indicators.	27	10	D16(RS3)
16. What are the main features of the health team concept?	36	—	D00, D01, J10, D15
17. What are the various concepts related to causation of disease?	39	11	J09
18. Describe the epidemiological triad giving suitable examples.	39	11	J01, J07, J12
19. Describe multifactorial causation of disease with example.	40	11	J06
20. What is web of causation? Explain with a suitable example.	41	11	D13(RS3)
21. Natural history of a disease and its stages.	41	12	D08(RS2), J16(RS3), D05, D12



22. Explain the risk factors in disease.	44	13	D06
23. Iceberg phenomenon of diseases—meaning and application, with suitable examples.	46	14	J10(RS2), D11(RS2), D12(RS3), J15
24. Sentinel surveillance.	47	238	J12(RS2)
25. Levels of prevention. Explain with examples.	47	15	D01, D02, J15
26. Primordial prevention. Explain with suitable examples.	48	15	J16(RS3), D08
27. Describe the health promotional measures.	49	15	D06
28. Explain "specific protection" as an intervention in preventing a disease.	50	15	D13(RS3)
29. Describe the concept of disability with an example.	50	17	J09(RS2)
30. Rehabilitation—types and explain with suitable examples.	51	17	D19(RS3), D12
31. Community diagnosis.	56	4	J09
<b>Short Answers</b>			
1. Sullivan's index.	—	10	D11(RS2)
2. Distinguish between disease elimination and eradication.	—	—	J08
3. Define health.	14	6	D00, J03
4. List the dimensions of health.	14	6	D07
5. What is physical quality of life index (PQLI)?	17	7	D07(RS2), J11(RS2), D12(RS3), D13(RS3), D14(RS3), D17(RS3), D19(RS3), J02, J05, J08, J09, D15, D16
6. What is human development index?	17	7	J10(RS2), J13(RS3), D14(RS3), J17(RS3), J04, D04, J10

7. What is meant by spectrum of health?	18	7	D07
8. Write about determinants of health.	18	8	D03
9. Lifestyle and health.	19	8	D16
10. What is disability-adjusted life year (DALY's)?	26	10	J10, D13
11. Mention 'health-care delivery' indicators.	27	10	J14
12. What is health team?	36	—	J02
13. Germ theory of disease.	39	11	J12(RS2)
14. What is epidemiological triad?	39	11	D10(RS2), D14(RS3), D02, J10
15. What is web of causation of disease?	41	11	D07
16. Iceberg phenomenon of disease.	46	14	J17
17. Definitions of control, elimination and eradication.	46	236	J09(RS2), D06, J17
18. What is the main aim of disease eradication?	46	236	J01
19. Sentinel surveillance.	47	238	D10(RS2), D19(RS3), D14
20. Describe primordial prevention with examples.	48	15	J05, J14
21. Describe primary prevention with example.	48	15	J04, D03
22. Describe tertiary prevention with example.	48	17	D04
23. Modes of intervention.	49	15	J12(RS2)
24. Health promotion and specific protection.	49	15	J19(RS3)
25. Describe specific protection with example.	50	15	J06, D14
26. Disability limitation.	50	17	J10, D12(RS3)
27. Types of rehabilitation (three examples of rehabilitative measures).	51	17	J15
28. Vocational rehabilitation.	51	17	J19(RS3)



29. What is community diagnosis? 56 4 J03  
30. International classification of diseases. 56 — J17

### CHAPTER 3 PRINCIPLES OF EPIDEMIOLOGIC METHODS

#### Long Essays

1. Define epidemiology and discuss the objective of a descriptive study. 60, 71 215, 221 D09
2. Define epidemiology. What are the types of epidemiological studies designed to explore disease etiology? Discuss in detail 'framework' and 'steps' in conducting the cohort study. Mention the merits and demerits of cohort study. 60, 83, 87 215, 226, 229 J14
3. Define epidemiology. Describe the uses of epidemiology. 60, 99 215, 234 J07
4. Classify epidemiological studies. Describe time, place and person distribution with respect to descriptive studies. 70, 72 221 J15(RS3)
5. Define epidemiology. Classify epidemiological study designs. Write in detail about the steps involved in a cohort study. Write about the advantages and disadvantages of cohort study. 60, 70, 87 215, 226, 229 J17(RS3), D15
6. Explain the term "time distribution of disease". List and briefly explain the types of temporal variation of disease. 72 221 J03
7. Types of epidemics and epidemic curve. 72 222 D16(RS3)
8. Define epidemiology. Classify epidemiologic methods. What is case control study? Write the basic stages (framework for analysis) with suitable examples and mention the advantages and limitations of study. 60, 70, 79 215, 224 J14(RS3), J18(RS3), D13, D06, J17
9. Define cohort. Describe in brief about cohort studies with examples and write a note on its advantages and disadvantages. 83 226 D16(RS3), D19(RS3)
10. Describe the main differences between case-control and control studies. 87 230 J06

11. What is a randomized controlled trial? Enumerate the different types of randomized controlled trials (RCT). Outline the steps involved in conducting a RCT. Add a note on "blinding". 89 230 J13(RS3), D14(RS3), D15(RS3)
12. Define the terms endemic, epidemic and pandemic. Outline the objectives and steps involved in the investigation of an epidemic. 101, 143 236, 243 J19(RS3), J04, D04, D14
13. Define epidemiology. What is chain of infection? What are the various modes of disease transmission? Describe briefly various measures of prevention and control of communicable diseases against each of the links in disease transmission. 60, 102 215, 239, 244 J09(RS2), J16(RS3), D18(RS3)
14. Who is carrier of infection? What are the types of carriers, give appropriate examples? Write control measures for each of these. 103 239, 244 J12
15. What are the host defence mechanisms? Describe briefly about the various components of the host defence mechanisms. 108 — J11(RS2)
16. What is cold chain? Describe the cold chain equipments. Mention the factors that determine the effective functioning of cold chain. 117 258 J10, D12
17. Write in detail about "adverse events following immunization (AEFI)" and the precautions to be taken. 122 248 D16(RS3)
18. Discuss in detail about the various agents used for disinfection. 140 268 D10(RS2)
19. Explain the steps in "investigation of an epidemic" with suitable examples. 143 243 D15(RS3)

#### Short Essays

1. Ecological studies. — — D14(RS3)
2. What is the difference between relative and attributable risk? — 229 J01
3. Explain differences between an epidemic sporadic endemic and pandemic. Give suitable examples. — — D02



4. Differentiate between a carrier and reservoir of infection.	—	—	J05
5. Differentiate between incubation period and the period of communicability.	—	—	J04, D04
6. What is the difference between generation time and incubation period.	—	—	J11(RS2)
7. Illustrate the elements of cold chain.	—	259	D06
8. International quarantine.	—	—	J05
9. Primary immunization.	—	—	J15(RS3)
10. Define epidemiology. Classify epidemiological study designs.	60	215	D12
11. Four aims of epidemiology.	61	215	D00
12. Difference between epidemiology and clinical medicine.	61	—	J12(RS2)
13. Tools of measurement in epidemiology.	63	215	D15(RS3)
14. Define rate, ratio and proportion using appropriate examples.	63	215	D17(RS3)
15. Mortality rates and ratios.	65	218	D07(RS2)
16. Survival rate.	66	219	D16(RS3)
17. Morbidity indicators of health.	68	216	D09(RS2), D18(RS3)
18. Relationship between prevalence and incidence (prevalence vs incidence).	69	217	J14(RS3), J16(RS3), J19(RS3)
19. Describe the different types of epidemics with examples.	72	221	J05, J13
20. Epidemic curve.	72	222	J10(RS2), D12(RS3)
21. Explain 'common source epidemics' with examples.	72	221	D14
22. Propagated epidemic.	73	222	J09(RS2)
23. What are secular trends? How are they useful to the doctors?	74	222	J11(RS2)
24. Geographic distribution of diseases and its relevance in epidemiology.	74	222	D08
25. What are cross-sectional studies? Mention the advantages and limitations of this type of study design.	77	224	J13(RS3)

26. Explain case control study. Add a note on Odd's ratio.	79	225	D12
27. Discuss the types of bias (in case control study).	81	226	D11(RS2), D12(RS3), J14(RS3), D18(RS3)
28. Write the advantages and disadvantages of case control study.	82	—	D07(RS2), J16(RS3), D03
29. Cohort study—steps, risk measurements.	83	226	D08(RS2), D05
30. Relative risk and attributable risk.	86	228	J18(RS3), D16
31. Attributable risk and population attributable risk.	86	229	D17(RS3)
32. Explain the difference between a case control study and a cohort study.	87	230	J10(RS2), D01, D02, D07, J13
33. Write the steps involved in a randomized controlled trial.	89	230	D09(RS2), D13(RS3), D16
34. Write the uses of epidemiology.	99	234	J12(RS2), D03, J08, D11, J15
35. Cross-over type of study design.	91	231	D07(RS2)
36. What do you understand by cessation experiments?	93	—	J10
37. Different types of association.	95	233	D17(RS3)
38. What is spurious association? How do you prevent it during research studies?	95	234	J11(RS2)
39. Carrier state in disease—salient features, classification with examples.	103	239	J08(RS2), D08(RS2), J09(RS2), D11(RS2), J13(RS3), J14(RS3), J04, D04, J06, D13
40. Write the various modes of disease transmission with examples and control measures based on each.	104	240	D17(RS3), D03, J12



41. Modes of direct transmission of diseases.	105	240	J15
42. Discuss the various modes of indirect transmission.	105	240	J13
43. Describe the types of transmission of arthropod-borne disease.	106	241	J06
44. Write a short note on biological transmission of arthropod-borne disease.	106	241	J12(RS2), J05, D08, D15
45. What is meant by active immunity?	109	—	D07
46. Primary response.	109	—	D10
47. Herd immunity and its importance.	110	—	J12(RS2), J02, J15
48. Live vaccines.	111	246	J14(RS3)
49. Write the role of immunoglobulins in disease prevention.	114	247	D03
50. Cold chain.	117	258	D15(RS3), J17
51. Cold chain equipment (present in PHC).	118	259	D07(RS2), J15(RS3), J17(RS3), D14
52. Concepts of control.	130	244	J18(RS3)
53. Methods for control of "reservoir of infection".	131	244	J08(RS2), J12
54. Quarantine.	132	245	D16(RS3)
55. Describe the national immunization schedule.	134	250	J18(RS3), J07, J17
56. Immunization for school aged children.	135	251	J03
57. Describe the term surveillance with example.	138	236	D06
58. Emporiatrics (health advice to travelers).	138	274	D18(RS3), D15
59. Types of disinfection.	139	268	D15
60. What is concurrent disinfection? Give examples.	139	268	D09
61. Methods for disinfection for control of communicable diseases.	139	267	J08(RS2)

## Short Answers

1. What is the difference between secular trend/cyclic trend?	—	—	D03
2. What is geographical mapping of a disease?	—	223	D02
3. Disease outbreak with suitable examples.	—	—	J19(RS3)
4. Difference between epidemic and outbreak.	—	—	J11(RS2)
5. Differentiate between endemic and epidemic.	—	—	D10(RS2), J09
6. International quarantine.	—	—	D07(RS2), D08(RS2)
7. Difference between quarantine and isolation.	—	—	J15(RS3), J05
8. Mode of action of hand-wash gels.	—	—	J11(RS2)
9. Aims of epidemiology.	61	215	D11(RS2), J14(RS3)
10. Tools of measurement of disease magnitude.	63	215	D07(RS2)
11. What is international death certificate?	64	—	J08
12. Mortality indicators.	65	218	D13
13. Crude death rate.	65	218	D08(RS2)
14. Write briefly on case fatality rate.	66	219	D10(RS2)
15. Direct standardization.	66	220	D16
16. Standardized death rate.	66	220	D09(RS2)
17. List the morbidity indicators.	68	216	J08
18. Write the formula for calculating "Incidence rate".	68	216	J07
19. Incidence and prevalence of a disease.	68	216	D13, J15
20. What are the uses of incidence?	69	216	J06
21. Relationship between incidence and prevalence (difference).	69	217	D07(RS2), D03, J10
22. Mention the procedures in descriptive studies.	71	221	J06
23. What are the different types of epidemics?	72	221	D09(RS2), J18(RS3), D07



	PARK	SYKNT	
24. Epidemic curve.	72	222	D16
25. Write about common source epidemic.	72	221	J08
26. Secular trend in a disease.	74	222	D10
27. Migration studies.	75	—	J10(RS2)
28. Selection criteria and sources of cases in case-control study.	79	224	D11
29. Confounders in a case control study.	79	225	D09, J15
30. Matching.	80	225	D18(RS3)
31. Odds ratio.	81	225	J12(RS2), D13(RS3), J14(RS3), J16(RS3), D15
32. What is bias in epidemiological studies (case control study).	81	226	J01, J09, J10
33. List the types of cohort studies.	84	226	J01
34. Relative risk—define, calculations.	86	228	J11(RS2), D11(RS2), D15(RS3), J05, D07, D13, J15
35. Attributable risk—calculations.	86	229	J10(RS2), D12(RS3), J04, D04, D12
36. Population attributable risk—formula and significance.	86	229	J17
37. Advantages of cohort studies.	87	229	J04, D04, D08
38. Problems in a cohort study.	87	229	J12
39. Advantages and limitations of animal experiments.	89	—	D07(RS2)
40. Write the steps of randomized control trial.	89	230	D03
41. Blinding—define, types.	91	231	J08, J13
42. What is blinding in randomized controlled trials?	91	231	D12(RS3)
43. Spurious association.	95	234	J09(RS2)

	PARK	SYKNT	
44. Biological plausibility.	98	233	J19(RS3)
45. Enumerate the uses of epidemiology.	99	234	D01
46. Epidemic.	101	236	J16(RS3), D17(RS3)
47. Sporadic diseases.	101	236	J11(RS2)
48. What is pandemic?	101	236	J02
49. Exotic diseases with examples.	101	236	J09(RS2)
50. Epizootic and enzootic.	102	236	J01
51. Define source and reservoir. Give examples.	102	239	J15
52. Disease carriers and types.	103	239	D19(RS3), J02, D08, D14
53. Diseases transmitted by fomites.	106	241	D09
54. Write the criteria for successful parasitism.	107	241	D12
55. Explain dead end infection with examples.	107	241	J06
56. Incubation period—usefulness.	107	241	D00, D01, D08, D12
57. What is serial interval?	108	242	J02
58. Secondary attack rate and its calculations.	108	242	J15(RS3), J13, D13, D14, D15
59. Herd immunity.	110	—	D17(RS3), J14, D16
60. List the vaccine preventable diseases.	111	—	J09
61. Enumerate the live vaccines.	111	246	J03
62. Killed vaccines.	112	246	D16(RS3)
63. Toxoids.	113	246	D15(RS3)
64. Define cold chain and reverse cold chain.	117	258	J19(RS3)
65. Cold chain system.	117	258	D01, D06, J08
66. What is vaccine vial monitor (VVM)?	121	351	J13(RS3), D18(RS3), D02, J02, J17



	PARK	SYKNT	
67. Hazards of immunization (adverse events following immunization).	122	248	D07(RS2)
68. Quarantine.	132	245	D11(RS2), D18(RS3), D15
69. National immunization schedule (for under-5).	134	250	D07(RS2), J16(RS3)
70. Empiricotics and its components.	138	274	D02
71. Disinfection—define, properties of an ideal disinfectant.	139	267	D19(RS3), D10
72. Methods of disinfection.	143	272	D16
73. Methods of disinfection of sputum.	143	272	D08
74. Disinfection of air.	143	272	D15(RS3)
75. Epidemiological case sheet for investigation of an epidemic.	143	243	J08(RS2)

#### CHAPTER 4 SCREENING FOR DISEASE

##### Long Essays

1. Define "screening" list and briefly describe the criteria for a good screening test. List and briefly describe the features of a disease which make it suitable for screening.	148	264	D10(RS2)
2. Define the term screening for disease. Describe screening for diseases in terms of definition, types, uses, criteria for selection for disease and selection for screening test.	148	264	D01, D08

##### Short Essays

1. Screening and diagnostic test—difference.	148	265	J15(RS3), J16(RS3), J11
2. Concept of "lead time".	148	267	J09(RS2)
3. Health screening—define, types, uses.	148	264	D11(RS2), D15(RS3), J17(RS3), J19(RS3), D19(RS3), J13, J14, J15, D15

	PARK	SYKNT	
4. Qualities of a good screening test.	150	265	D08(RS2)
5. Validity of a screening test.	151	266	D08, J09
6. Sensitivity and specificity of a screening test.	152	266	J08(RS2), J14(RS3), D13, J17
7. Implications of false positive and false-negative results in clinical practice.	153	—	D17(RS3)
<b>Short Answers</b>			
1. Sensitivity of a diagnostic test.	—	—	D15
2. Differences between a screening and a diagnostic test.	148	265	D13
3. What is lead time in screening disease?	148	267	J18(RS3), D01
4. What are the uses of screening?	149	265	D12(RS3), D12, D16
5. Types of screening.	150	265	J17
6. Name any four criteria for a disease to be chosen for screening.	150	265	D13(RS3)
7. Sensitivity and specificity.	152	266	J03
8. Write the formulae for calculation of sensitivity and specificity.	152	266	J11(RS2)
9. Predictive value of a screening test.	153	266	J13(RS3)
10. Give some examples of screening tests.	155	265	D07(RS2)

#### CHAPTER 5 EPIDEMIOLOGY OF COMMUNICABLE DISEASES

##### A. RESPIRATORY INFECTIONS

##### Long Essays

1. Describe epidemiology, clinical features, complications and prevention and control of measles. Add a note on measles vaccination.	160	283, 285	D10(RS2), J12(RS2), J15(RS3), J17(RS3), D16
2. How will you investigate an outbreak of meningococcal meningitis in a school hostel? Describe the control and preventive methods to be adopted.	179	313	D10



3. Describe the problem of tuberculosis in India. Enumerate important epidemiological indices to measure the problems of tuberculosis. Describe the natural history (epidemiology) of tuberculosis and its diagnosis and current strategy in the prevention and control of tuberculosis (drugs regimens) (RNTCP). 189, 191, 193 314, 315, 317 D09(RS2), D16(RS3), J09
4. Describe in detail about directly observed treatment short course (DOTS) chemotherapy in tuberculosis and its 'components'? Describe the 'revised' strategy for the management of patient under DOTS. 201, 457 796, 804 D15(RS3), D15

## Short Essays

1. Describe the Schick test. — 308 J05
2. Define tuberculosis control in the community. Name at least two countries that have controlled tuberculosis. How could they do it. — J11(RS2)
3. WHO strategy for elimination of measles. 160 288 D13(RS3)
4. Measles—natural history, complications, prevention and control. 160 283 D16(RS3), J18(RS3), D07, J13
5. Describe the Koplik's spot. 161 284 J04
6. Measles vaccine. 161 285 D11(RS2)
7. Congenital rubella—assess probability of occurrence, prevention 164 290 J11(RS2), D15(RS3)
8. Discuss the epidemiological features of mumps. 165 291 D12
9. Pandemic influenza A—vaccine and treatment. 169 295 J14(RS3)
10. Pentavalent vaccine. 175 309 D15(RS3), D16(RS3)
11. Write the names of five bacterial agents that can cause acute respiratory infections (ARI) among children. What is the dose schedule of cotrimoxazole for the treatment of pneumonia among children below 5 years of age, as per the ARI control program. 181, 184 280, 282 J11(RS2)

12. How children suffering from ARI are classified? Write indications of referrals. 182 282 D11
13. Epidemiological indices in tuberculosis. 191 315 J16(RS3)
14. Collection of sputum sample in tuberculosis. 195 — J14(RS3)
15. Tuberculin test. 197 317 D15(RS3)
16. DOTS therapy in tuberculosis—strategy, advantages. 201 797 D05, J06
17. Write briefly on antitubercular treatment as per RNTCP guidelines. 203 812 D12
18. Give an account of BCG vaccination. 213 320 D10
19. Stop TB Strategy. 219 821 J15(RS3)

## Short Answers

1. Epidemiological basis for eradication of smallpox. — 277 D12(RS3)
2. What are the cardinal features of pulmonary tuberculosis? — — J06
3. What are Koplik's spots? 161 284 J10, D12
4. Describe rash in measles. 161 284 D11(RS2)
5. List three complications of measles. 161 284 J17
6. Prevention of measles. 161 285 J10(RS2)
7. Measles vaccine (complications). 161 285 D14(RS3), J17(RS3), J19(RS3), J14
8. Write control measures for measles. 162 285 D05
9. Congenital rubella syndrome. 164 290 D12(RS3), D14(RS3), D17(RS3), D18(RS3), J19(RS3), D13
10. Measles rubella vaccine. 164 286 J18(RS3), D19(RS2)
11. What is antigenic shift and antigenic drift? 167 293 J03
12. Prevention of influenza. 168 299 D06, D12
13. Influenza vaccine. 168 299 J10(RS2)



14. Influenza A (H1N1).	169	295	D17(RS3)
15. DPT—common side effects.	175	309	J11(RS2)
16. Pentavalent vaccine.	175	309	J18(RS3)
17. Vaccine for meningococcal meningitis.	179	313	J09(RS2)
18. Severe acute respiratory syndrome (SARS)—preventive measures.	187	321	J16(RS3), D10
19. Define new case, relapse, failure with reference to tuberculosis.	192	804	D10(RS2)
20. What do you understand by the term treatment completed in tuberculosis?	192	804	D09
21. Mantoux test.	198	317	J11(RS2), D06
22. What is supervised treatment?	201	796	J03
23. Directly observed treatment short course chemotherapy—strategy, components.	201	796	J08(RS2), J13(RS3), J02, J07
24. BCG vaccine.	213	320	D05
25. End TB strategy.	219	821	D18(RS3)

## B. INTESTINAL INFECTIONS

### Long Essays

1. Describe in detail the strategies for polio eradication in India.	228	786	J14(RS3)
2. Discuss polio eradication in the light of epidemiological factors influencing poliomyelitis.	228	351	J08(RS2)
3. What is the rationale behind pulse polio immunization? List the main activities under National Pulse Polio Immunization campaign in India.	228	786	D02, D04
4. Enumerate the diseases transmitted by feco-oral route. Describe in brief the strategy for the control of hepatitis A.	232	340	J05
5. Discuss the epidemiology, clinical course and prevention of hepatitis B infection.	233	341	D14(RS3), J13
6. What are the epidemiological factors contributing to acute diarrheal diseases? Discuss briefly about its prevention and control measures.	245	329, 333	D13(RS3)

7. What are the causes of acute diarrhea? Describe the signs of severe dehydration. How will you manage a child with signs of severe dehydration?	245, 247	329, 330	J14
8. What are the steps in the investigations of an outbreak of food poisoning in the school hostel located in your area?	262	176	J01, J11

### Short Essays

1. Describe the Intensified pulse polio program (IPPI).	—	786	J09(RS2), J10(RS2)
2. Describe the steps of outbreak response immunization, with regards to poliomyelitis.	—	789	J17
3. Define acute flaccid paralysis.	—	789	D16(RS3)
4. Describe the differential diagnosis of acute flaccid paralysis.	—	789	J17
5. Chandler's index and its public health importance.	—	359	D16(RS3), D07
6. What are the strategies for polio eradication? Add a note on pulse polio immunization.	228	786	J13
7. What is acute flaccid paralysis surveillance?	223	789	D14(RS3), J02
8. Oral polio vaccine—dose schedule, advantages.	226	350	D08, J10
9. Mention the steps involved in eradication of poliomyelitis.	228	786	J12(RS2), J17(RS3)
10. Pulse polio immunization.	228	786	D06
11. Hepatitis B—modes of transmission/ prevention (primary) and control.	233	342	D09(RS2), J12(RS2), J15(RS3), J17(RS3), D18(RS3), D15
12. Hepatitis B vaccine—schedule.	235	343	J14(RS3)
13. Oral rehydration therapy—indications.	247	331	J14(RS3)
14. Describe the composition of the low-osmolality oral rehydration salt.	247	—	J17
15. Write the guidelines for assessing dehydration following diarrhea.	247	331	J06



## PARK SYKNT

16. 'Carriers' in cholera.	253	336	D14
17. Write briefly about measures to be taken to control a cholera outbreak.	255	337	D14(RS3), J13
18. Typhoid fever—epidemiological features/ prevention and control (of carriers).	258	325	J10(RS2), J07, J13
19. Anti-typhoid vaccine.	260	328	J16(RS3), D12, D14
20. Name three communicable/nutritional diseases caused by toxin in the food with examples.	261	173	D03, J05
21. Steps of investigation of food poisoning in a boy's hostel.	262	176	J15(RS3), D08, D14
22. Differential diagnosis of cholera and food poisoning.	263	337	D09(RS2)
23. Prevention and control of food poisoning.	263	177	J15(RS3)
24. Mention food sanitation measures against food poisoning.	263	177	D10
25. Primary prevention of amoebiasis.	264	355	D09(RS2)
26. Enumerate the soil transmitted helminthes and diseases caused by them.	265	357	D10(RS2)
27. Prevention of hookworm infestation.	267	361	D17(RS3)
<b>Short Answers</b>			
1. Define acute flaccid paralysis.	—	789	D16(RS3)
2. What is the composition of super ORS?	—	322	D03
3. What is Chandler's index?	—	359	J12(RS2), J17(RS3), J15
4. What is provocative poliomyelitis?	225	348	D01, D04
5. Salk polio vaccine.	226	349	J15(RS3)
6. Oral polio vaccine.	226	349	D12(RS3)
7. List the strategies of polio eradication.	228	786	J08, D14
8. Mopping up in polio eradication.	228	788	D17(RS3)
9. Australian antigen.	233	341	J09
10. Hepatitis B vaccine.	235	343	J13
11. Rotavirus.	245	329	J15(RS3)

## PARK SYKNT

12. Diarrheal disease control program.	246	823	J09(RS2)
13. Oral rehydration therapy.	247	331	J08
14. Oral rehydration solution—composition.	247	332	J04, D09
15. Assessment of dehydration.	247	331	D15(RS3), D13
16. Briefly describe the rotavirus vaccine.	250	333	D16
17. Dynamics of typhoid fever transmission.	258	326	D09(RS2), J14(RS3)
18. Botulism.	262	176	J15(RS3), D19(RS2)
19. Bacillus cereus food poisoning.	262	176	D09
20. Treatment of amoebiasis.	265	354	D15(RS3)
21. Hookworm—prevention.	267	361	J15(RS3)
22. Deworming.	268	358	D18(RS3)

## C. ARTHROPOD-BORNE INFECTIONS

## Long Essays

1. What are the factors responsible for resurgence of malaria?	—	773	D00, D01, D09
2. Describe the epidemiology, clinical features and control measures for dengue in India.	270	394	D05, D13
3. Discuss epidemiology of malaria. Write briefly about its prevention and control.	282	367	J13(RS3), D06
4. What is API? Describe in brief the strategy for the control of malaria under national program.	286, 447	369, 773	D03
5. Describe the epidemiology and prevention and control of lymphatic filariasis.	296	376	J06
<b>Short Essays</b>			
1. Differentiate between extrinsic and intrinsic incubation period.	—	242	D05
2. What is the radical treatment for malaria as per NMEP?	—	—	J01, J08, J14



3. Dengue (hemorrhagic) fever— epidemiological features, WHO classification, prevention and control.	270	394	J12(RS2), J14(RS3), J17(RS3), D19(RS2)
4. Management of dengue hemorrhagic fever (in PHC).	277	396	J11(RS2), J15(RS3) D09(RS2)
5. What are major epidemiological types of malaria in India?	281	—	D05
6. Tribal malaria.	281	—	D15(RS3)
7. What is extrinsic incubation period? Give one example.	283	242	D03
8. Malarial indices.	286	369	D12(RS3)
9. How do you calculate annual parasite incidence? What is the current API in India.	286	369	J11(RS2)
10. Write about the treatment strategy for malaria control.	287	370	D05
11. Clinical manifestation of filariasis.	297	377	J15
12. Why do we take night blood smears? What is the rationale in mass drug administration.	298	378	J11(RS2)
13. Explain filarial indices.	298	378	D00, D01
14. Mass chemotherapy (mass drug administration) in filariasis control.	299	379	J09(RS2), D12(RS3), J13(RS3), D16(RS3)
<b>Short Answers</b>			
1. What is hypnozoite?	—	368	D03
2. Presumptive treatment of malaria— define/for vivax malaria.	—	—	J04, J10
3. Write the radical treatment for vivax malaria/ <i>Plasmodium falciparum</i> .	—	—	D03
4. Presumptive versus radical treatment in malaria.	—	—	D07
5. Community participation in malaria control.	—	—	D06
6. Mention three gametocidal drugs in malaria control.	—	—	J11(RS2)

7. Dengue shock syndrome—manifesta- tions, management.	274	395	J10(RS2), D15(RS3), J09
8. Extrinsic incubation period.	283	242	J09
9. What is the cause of relapse in vivax malaria?	283	368	J05
10. What is man made malaria?	284	367	D01, D04
11. Name the parameters of malaria surveillance (measurement of malaria).	286	369	J07, J09
12. Management of <i>Plasmodium vivax</i> malaria.	289	370	J14(RS3)
13. Write the treatment of falciparum malaria.	289	370	J05
14. Chemotherapy for cerebral malaria.	291	373	J03
15. Chemoprophylaxis for malaria.	292	373	J03
16. Malaria vaccine.	294	375	J15(RS3)
17. Night blood examination.	298	378	J02, J03
18. Xenodiagnosis.	298	378	D16(RS3)
19. Mass drug administration for filariasis.	299	379	J12(RS2), J17(RS3)
<b>D. ZOONOSES</b>			
<b>Long Essays</b>			
1. Describe the epidemiology of rabies and its prevention and control in India. (Write in short about the schedule of cell culture vaccine in prevention of rabies).	302	440.	D08(RS2), J10
2. Describe the epidemiological determinants, prevention and control measures of plague.	320	384	D12(RS3)
<b>Short Essays</b>			
1. Postexposure prophylaxis in rabies/dog bite (antirabies immunoprophylaxis).	304	443	J13(RS3), D17(RS3), J18(RS3), J19(RS3), J08, J15, J17
2. Write briefly about various vaccines for rabies.	304	444	D05



3. Antirabies immunization in class III exposure.	305	445	J03
4. Intradermal rabies vaccination	305	447	J05
5. Write the pre-exposure prophylaxis for rabies.	306	448	J04
6. Measures to prevent entry of yellow fever into India.	309	393	J08(RS2)
7. International vaccination certificate.	309	393	D10
8. Japanese encephalitis—natural history/specific protection	312	398	D08(RS2), D13(RS3)
9. Kyasanur forest disease—epidemiological factors, prevention and control measures.	315	403	J07
10. What control measures would you recommend for control of Chikungunya outbreak?	316	402	D07(RS2)
11. Mention the methods in laboratory diagnosis of plague.	322	386	D10
12. List the Rickettsial diseases.	326	405	D07
<b>Short Answers</b>			
1. Advantages of Intradermal rabies vaccine.	—	447	D13(RS3)
2. Anthroponoses—give an example.	302	240	D16(RS3)
3. Modes of transmission of rabies.	303	441	D09(RS2)
4. Postexposure prophylaxis of rabies.	304	443	D12(RS3), D13
5. List the vaccines against rabies as post-exposure prophylaxis.	304	444	D07
6. What are the indications for antirabies treatment?	304	444	D08
7. Describe the intradermal schedules of cell culture vaccine for rabies.	305	447	J07
8. Describe the pre-exposure prophylaxis for rabies.	306	448	J06
9. Urban rabies.	307	441	J14(RS3)
10. Vaccination against yellow fever (17D vaccine).	308	393	J01, J03, J09

11. International certificate of vaccination	309	393	J14(RS3)
12. Amplify zoonoses with examples.	312	398	J09(RS2)
13. Vectors of Japanese encephalitis	312	399	J09
14. Kyasanur forest disease—prevention and control (activities for limiting the spread)	315	405	J03
15. What is a blocked flea?	320	385	J12(RS2), J17(RS3), D17(RS3)
16. Write five rickettsial diseases with names of vector.	326	405	D03
<b>E. SURFACE INFECTIONS</b>			
<b>Long Essays</b>			
1. Describe the natural history (epidemiology) of tetanus and outline the strategies adopted for its prevention and control.	339	362	J09(RS2), J07, D08
2. What are the factors responsible for the spread of HIV infection in India? Enumerate the personal protective measures for HIV infection.	359, 379	408, 429	J03
3. Write epidemiology of HIV infection. What are the preventive and control measures taken in India?	373, 379	420, 425	D11
<b>Short Essays</b>			
1. Write about the counselling for a HIV positive individual.	—	826	J05
2. Control of trachoma.	337	494	D15(RS3)
3. Tetanus neonatorum—prevention.	338	365	J13(RS3), D15
4. Describe the lepromin test.	347	453	D03
5. Write about the treatment strategy of leprosy eradication (Multidrug therapy in leprosy).	349	460	D08(RS2), J16(RS3), D06
6. Name the deformities in leprosy. Add note on clawing.	354	463	J06
7. Epidemiology of STD's.	359	408	D16(RS3)



8. Syndromic management of vaginal discharge.	362	413	D15(RS3)
9. Management of genital ulcers.	364	411	J14(RS3)
10. What are the measures for control of sexually transmitted diseases?	367	409	J12(RS2), J17(RS3)
11. Write about the mother to child transmission of HIV.	375	434	D03
12. Prevention of parent to child transmission.	375	435	D18(RS3)
13. Clinical manifestation of HIV infection.	375	424	J15(RS3)
14. Describe common opportunistic infections in AIDS.	376	424	J17
15. Postexposure prophylaxis for HIV.	382	433	J14

**Short Answers**

1. What are candidate vaccines for leprosy?	—	462	D08
2. Enumerate the complications of sexually transmitted diseases.	—	—	D09
3. HAART (Human AIDS antiretroviral therapy).	—	425	J16(RS3)
4. Universal precautions in HIV infection.	—	432	D09, D13
5. Define blanket treatment with suitable example.	337	—	J03
6. Prevention of neonatal tetanus.	341	366	D11(RS2), D14(RS3), J15(RS3)

7. What is morphological index?	347	453	J07
8. Morphological Index and bacterial index in leprosy.	347	453	D13
9. Lepromin test.	347	453	D05
10. Fernandez reaction.	348	454	J11(RS2)
11. What are the case finding methods in leprosy?	349	459	D09
12. Objectives of multidrug therapy in leprosy.	349	460	D16(RS3)
13. Treatment for leprosy.	351	460	J12(RS2), J17(RS3)

14. Write the drug schedule for multibacillary leprosy.	351	460	D03, J04
15. Write the drug schedule for paucibacillary leprosy.	351	460	J05, D14
16. What are the deformities occurring in the leprosy?	354	463	D09(RS2)
17. Syndromic management of urethral discharge.	361	412	J16(RS3)
18. Write case detection in HIV in India.	367	409	J11
19. Contact tracing in sexually transmitted infections.	367	409	D09
20. List out the various routes of transmission of HIV infection.	374	422	J13
21. Window period.	375	424	D09(RS2), D00, D02, J04
22. Case definition used for diagnosis of AIDS.	376	424	J12(RS2), J17(RS3)
23. Western blot test.	378	—	J14(RS3)
24. Write about postexposure prophylaxis for HIV.	382	433	D08

**F. EMERGING AND RE-EMERGING INFECTIOUS DISEASES****Short Essay**

1. Ebola fever.	384	869	J16(RS3)
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**Short Answers**

1. List the re-emerging infectious diseases.	386	875	D07, D11
2. Preventive measures in Ebola virus disease (EVD)—disease transmission.	384	870	J17(RS3)
3. Control of Ebola virus disease (EVD).	384	870	D16(RS3)

**G. HOSPITAL-ACQUIRED INFECTIONS****Short Answer**

1. What are nosocomial infections? Give examples.	387	273	J13(RS3)
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# CHAPTER 6 EPIDEMIOLOGY OF CHRONIC NONCOMMUNICABLE DISEASES AND CONDITIONS

## Long Essays

1. Explain the epidemiology (risk factors) and methods of prevention and control of coronary heart disease.	398	472	J18(RS3), D02, D04, J10
2. Describe the natural history of stroke. What measures can be taken at the community level to control it?	408	478	J08(RS2)
3. Classify diabetes mellitus. Describe the epidemiological factors causing the increased prevalence of the disease in India.	421, 423	486	D18(RS3)
4. Write about risk factors (multicausation) and complications of diabetes mellitus. Add a note on control and prevention of diabetes mellitus (in district)/Add a note on self-care in diabetes.	423, 425	487, 490	J10(RS2), D11(RS2), D12
5. What are the causes of obesity in India and how to manage this situation.	427	479	J19(RS3)
6. Define accident. Enumerate the types of accident. Give an account of primary factors associated with accidents/describe in detail the risk factors and preventive measures for accidents.	436	491	D17(RS3), D19(RS2)
7. Describe the epidemiology of road traffic injury. Describe the prevention and control of accidents in India.	438	491	J16(RS3), D09, J11

## Short Essays

1. Write how you will plan for the prevention of diabetes in primary health center area.	—	—	D06
2. Write how you will plan for the prevention of blindness in a primary health center area.	—	—	D05
3. Domestic accident prevention.	—	492	J14(RS3)
4. How do you measure the burden of coronary heart disease in the community.	397	—	D11(RS2)
5. Risk factors in coronary heart disease (coronary risk factors)	398	472	J15(RS3), J04, J09
6. Role of 'diet' in cardiovascular diseases.	398	473	D14

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7. Prevention of coronary heart disease.	400	472	D15(RS3)
8. "Rules of halves" in hypertension	403	476	D08(RS2), D10(RS2), J14(RS3), D03
9. What are the risk factors for hypertension? Discuss briefly its preventive measures.	405	476	D12(RS3), J06
10. Epidemiology of stroke	408	478	J08
11. Prevention of rheumatic fever (heart disease).	410	475	D16(RS3), D19(RS2), D16
12. Describe epidemiological triad with reference to cancer.	414	482	D09
13. Primordial prevention of cancer.	415	483	D07(RS2)
14. Warning (danger) signals of cancer with examples.	415	483	D10(RS2)
15. What is cancer registry? Write its public health importance.	415	—	J12(RS2), J17(RS3), J11
16. Cancer screening in India.	416	484	J13(RS3), J03, J09
17. Describe the method of screening for cancer cervix.	416	485	D10
18. Describe the epidemiological features of oral cancers in India.	417	—	J07
19. Epidemiological determinants of diabetes mellitus (Type 2).	423	487	D14(RS3), D13
20. What are the methods of screening for diabetes mellitus?	424	489	D00, J01, D02, D04
21. Prevention of diabetes mellitus.	425	490	D13(RS3)
22. Body mass index—calculation and interpretation.	428	479	J17
23. Obesity—epidemiological determinants/assessment/health hazards/prevention and control.	428	479	J10(RS2), D18(RS3), D19(RS2), J02, J07, J13
24. Preventable blindness—causes and prevention.	430	493	D09(RS2), J15(RS3), J08, D08, J12, D12, D13



25. Describe the epidemiology and prevention of accidents.	438	491	J12(RS2), J17(RS3)
26. Primary factors associated with accidents.	438	491	J18(RS3)
27. How can we prevent road accidents?	439	492	D08, J14
28. What are the safety measures for accident prevention?	440	492	D01
29. Enumerate domestic accidents and write preventive measures.	440	492	D11
<b>Short Answers</b>			
1. Life style disorders.	—	468	D06
2. What is accident proneness?	—	492	D02, J12
3. Accidentology.	—	—	J15(RS3)
4. List the gaps in natural history of chronic noncommunicable diseases.	393	—	J06
5. Risk factors for (ischemic) coronary heart disease.	398	472	J09(RS2), D14(RS3), J05, D05
6. What is rule of halves in hypertension?	403	476	J08(RS2), J12(RS2), J13(RS3), J17(RS3), J04, J07, J15
7. What is tracking of blood pressure?	404	476	J11, J13, D13
8. What are the non-modifiable risk factors for hypertension?	405	476	J08
9. Write modifiable risk factors for hypertension.	405	476	D11
10. Secondary prevention of hypertension.	407	477	J10(RS2)
11. Natural history of stroke.	408	478	D08(RS2)
12. Risk factors of stroke.	408	478	J18(RS3)
13. Describe the primary prevention of rheumatic heart disease.	410	475	D07(RS2), J06, J08
14. Secondary prevention of rheumatic heart disease.	410	475	D11(RS2), J18(RS3)
15. State the modified Jones criteria in acute rheumatic fever.	411	475	J10

16. Enumerate danger (warning) signals of cancer.	415	483	D15(RS3), D18(RS3), D00, J01, J02, J14
17. Cancer registration (cancer registers and its uses).	415	—	J10(RS2), J11(RS2), D13(RS3), J15(RS3), D08, D12
18. Vaccines for cancer.	—	485	J16(RS3)
19. Methods of cancer screening.	416	484	J15
20. Screening of cancer cervix.	416	485	J14(RS3), D14(RS3), D16(RS3), J19(RS3)
21. Screening for breast cancer.	416	—	D12(RS3), D16(RS3), D17(RS3), J08, D09
22. Pre-diabetes mellitus.	—	—	J18(RS3)
23. Clinical classification of diabetes mellitus.	421	486	J15(RS3)
24. 'Risk factors' for diabetes mellitus.	423	487	D15
25. State the WHO recommended diagnostic criteria for diabetes.	424	—	J17
26. What is self-care in diabetes mellitus?	425	490	D00, J02, J14
27. Foot care in a diabetic patient.	425	490	J19(RS3)
28. Body mass index.	428	479	D13(RS3), J14(RS3), D17(RS3)
29. Assessment of obesity.	428	479	J16(RS3)
30. List the hazards of obesity.	429	481	D00
31. What are the dietary principles in prevention and treatment of obesity?	430	481	D10
32. List the causes of (preventable) blindness in India.	431	493	J10(RS3), D01, D03, D04, J17
33. Risk factors for road traffic accidents.	438	491	J09(RS2)



34. Enumerate human factors in accidents.	438	491	D10(RS2)
35. Accident prevention	439	492	D05, J13
36. Domestic accidents (causes).	440	492	D08(RS2), J17
37. List three measures to preventive domestic accidents.	441	492	D16
38. State the steps in giving first-aid in burns.	442	—	D16

## CHAPTER 7 HEALTH PROGRAMS IN INDIA

### Long Essays

1. Enumerate vector-borne diseases of public health importance in India. Mention agents and vectors for the same. Describe activities under National Vector-borne Disease Control Program.	828, 445	98, 770	J19(RS3)
2. Enumerate the national health programs related to communicable diseases. discuss in detail the objectives, strategy and implementation of National Program for Control of Malaria.	447	770, 777	J15
3. Discuss Revised National Tuberculosis Control Program.	457	794	D12(RS3)
4. What is DOTS? Describe the strategy for the treatment under DOTS.	457	796	J04
5. Illustrate the diagnostic algorithm for tuberculosis under RNTCP. Describe the various treatment categories. List the major reasons for development of MDR TB.	202	809, 812	J17
6. National AIDS Control Program—explain in detail.	465	823	J15(RS3)
7. Explain in detail the National Program for Control of Blindness.	473	832	D15(RS3)
8. National Rural Health Mission—objectives and strategies, job responsibilities of ASHA.	485	725	J14(RS3), D13

9. What is the difference between family planning and family welfare? Describe the components and strategies under Reproductive and Child Health (RCH) Program. Explain the various services provided to the mothers under this program.	499	853	D08(RS2), D14(RS3)
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10. List all the national health programs for noncommunicable diseases. Discuss the strategy for prevention and control of 'blindness' under the national program.	509, 473	771, 833	D14
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### Short Essays

1. List the ten major national health programs.	—	770	J01, D02, D04
2. List the health programs for mothers and children.	—	545	J07
3. Write about modified plan of operation under National Malaria Eradication Program (NMEP).	—	773	D08
4. Name the strategies of tenth five-year plan for leprosy elimination.	—	784	J06
5. Preventive programs for HIV control under National AIDS Control Organization (NACO).	—	—	D06
6. Measures for control of Urban malaria.	446	774	J08(RS2)
7. Write a short note on strategies adopted for malaria control.	448	373	D14(RS3)
8. Describe the role of annual parasite incidence (API) in malaria control program.	448	369	D05
9. What is active surveillance for malaria control?	449	772	D02, D04
10. Describe the National Leprosy Control (eradication) Program.	454	782	J10(RS2), D17(RS3), J09
11. Revised national tuberculosis Control Program.	457	794	J08
12. Principles on implementation of DOTS.	458	796	D13



13. Describe the case finding tool for diagnosis of tuberculosis under RNTCP. Add a note on reasons for the false positivity and false negativity.	458	797	J12(RS2), J17(RS3)
14. Describe the strategies adopted by the National AIDS Control Program.	465	829	J10(RS2)
15. HIV sentinel surveillance.	466	238	J08, D11
16. Integrated counselling and testing centers.	468	825	D15(RS3)
17. Explain the components of parent to child transmission (PTCT) program.	468	435	D05
18. What is blood safety? How do you ensure blood safety? What is the current policy regarding blood donation?	471	823	J11(RS2)
19. Briefly discuss "National Program for Prevention of Blindness"—strategies.	473	832	D07(RS2), D13(RS3)
20. Vision 2020.	474	834	J13(RS3), D15(RS3)
21. Universal immunization program.	475	785	J13
22. Scope of health-care (health-care delivery mechanism) in an urban area (slums).	482	730	D06, D14, D15
23. Write in detail about National Rural Health Mission.	485	725	J12
24. Enumerate the components under reproductive and child health (RCH) program.	488	853	D00, J02
25. Essential obstetric care for ensuring safe motherhood.	490	853	J08(RS2)
26. Write the components of child survival under reproductive and child health program.	489	853	J05
27. Nutritional rehabilitation—principles and practice.	492	—	J11
28. Rashtriya Bal Swasthya Karyakram.	498	720	D19(RS2)
29. Describe the strategy under reproductive and child health program.	500	854	D06
30. National Cancer Control Program.	511	835	J09(RS2)

31. What are the new schemes initiated under the National Cancer Control Program?	511	836	D10
32. Write salient features of National Mental Health Program.	512	839	D11(RS2), J19(RS3)
33. Integrated disease surveillance project.	513	883	J16(RS3)
34. What is minimum needs programme? Comment.	519	860	D01
<b>Short Answers</b>			
1. Enlist various national health programs implemented for mothers and children in India.	—	545	D11
2. Give the objectives of modified plan of operation for malaria.	—	773	J06
3. Comment on malaria week.	—	—	J01
4. Social marketing in family planning.	—	—	J13
5. Enumerate National Health Programs of Vector-borne Diseases in India.	445	770	J10
6. Role of annual parasite incidence (API) in malaria control program.	448	369	J13
7. DOTS agents.	461	797	J16(RS3)
8. Sentinel surveillance for HIV in India.	466	238	D07(RS2)
9. Voluntary counselling and testing center.	468	825	J08(RS2), D19(RS2), D07
10. Social marketing of condoms.	471	—	J08(RS2)
11. Vision 2020: The right to sight.	474	834	D08(RS2), D18(RS3)
12. Reproductive and child health (RCH)—package/components.	488	853	J15(RS3), D05
13. Essential newborn care.	489	516	D07(RS2)
14. What is first referral unit?	490	854	J02
15. Nutrition rehabilitation center—concept.	492	—	J14(RS3)
16. Enumerate the illnesses managed under Integrated Maternal and Neonatal Childhood illnesses (IMNCI).	494	894	D15(RS3)
17. Adolescent Reproductive and Sexual Health (ARSH) or SNEHA Clinics.	502	671	D15(RS3)



	PARK	SYKNT	
18. Contraception and adolescence.	502	671	D18(RS3)
19. Integrated disease surveillance system.	513	883	J08(RS2)
20. Swachh Bharat	517	72	J19(RS3)

## CHAPTER 8 MILLENNIUM DEVELOPMENT GOALS TO SUSTAINABLE DEVELOPMENT GOALS

### Long Essay

1. What are the Millennium development goals (MDGs)? Critically analyze India's progress in achieving the goals with respect to maternal and child health.	521	683, 689	D13(RS3)
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### Short Essays

1. Millennium development goals.	521	683	D08(RS2)
2. How many Millennium development goals are related to the health of the community? What are they? Write about any one of them.	522	689	J11(RS2)

### Short Answer

1. Millennium development goals.	521	683	J11
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## CHAPTER 9 DEMOGRAPHY AND FAMILY PLANNING

### Long Essays

1. Define population explosion. What are the demographic trends in India? What measures do you suggest for the control of population explosion?	—	562	J11(RS2)
2. Describe in brief the different stages of demographic cycle. Explain in which stage India's population is and how?	530	552	D03, D11
3. Define couple protection rate and discuss the various contraceptive methods used for family planning.	544, 545	566	J08

### Short Essays

1. Factors responsible for population explosion in India.	—	563	D07
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2. Demographic cycle and its stages.	530	552	D09(RS2), D14(RS3), D16(RS3), D01, J09, J10, D13, J15, D16
3. Population pyramid and its significance.	533	556	J11
4. What is sex-ratio? Add a note on PNDT Act.	534	556, 918	J13(RS3)
5. Age pyramids of developed and developing country (like India).	534	557	J15
6. Write briefly about effects of urbanization on health (Problems of increase in urban population in India).	535	198	D12(RS3), J19(RS3), D19(RS2), D05
7. Write about life expectancy.	537	558	D08
8. Factors influencing fertility in a community/factors responsible for higher fertility in India.	538	560	J08(RS2), J06, D09, D15
9. List out fertility-related statistics.	539	560	D08(RS2)
10. Significance of 'family size' and its relationship with net reproduction rate (NRR).	540	558, 561	D14
11. Net reproduction rate and its importance.	540	561	D07
12. Health aspects of family planning.	542	565	J18(RS3)
13. Eligible couple.	543	566	J01, J17
14. Salient features of the National Population Policy.	544	750	D07(RS2), D17(RS3), J19(RS3)
15. Enumerate National Demographic Goals to be achieved by 2010.	544	751	D10(RS2), D12
16. Barrier (spacing) methods of family planning/conventional contraceptives—benefits.	545	567	D10(RS2), D07, J09
17. Write in brief about male contraceptives.	545	567, 584	D11
18. Intrauterine device—Ideal candidate, advantages, contraindications and side-effects.	548	570	J09(RS2), D17(RS3), D13, D16



19. Hormonal contraceptives—classify, mode of actions, method of administration, effects, contraindications, adverse effects and complications	551	573	J12(RS2), D12(RS3), J17(RS3), D09, D15
20. Newer contraceptive pills.	552	581	D08(RS2)
21. Emergency contraception/post-coital contraceptive.	552	576	D11(RS2), D12
22. Medical Termination of Pregnancy Act 1971—indications.	557	579	D07, J10, J12, D12, D16
23. What are the natural family planning methods?	558	580	J10(RS2), D08
24. Describe the evaluation of contraceptive methods based on effectiveness.	561	585	J07, D10
25. Community needs assessment approach.	566	—	J16(RS3)
26. Explain All India Hospital Postpartum Program.	567	859	J03, J07
<b>Short Answers</b>			
1. Demographic gap.	—	552	J08(RS2), D13(RS3), D15(RS3), J03, J09, J10
2. Population explosion.	—	562	D07(RS2), D05, J14
3. Zero growth rate.	—	—	D06
4. What is difference between family planning and family welfare?	—	—	J12
5. Role of interpersonal communication in birth control.	—	—	D05
6. Stages in demographic cycle.	530	552	D05, J13
7. Growth rate—define, present growth rate of India.	532	—	D11
8. What is a population pyramid (age pyramid)?	533	556	D08(RS2), D10(RS2), D18(RS3), J19(RS3), D02

9. What is dependency ratio?	535	557	J19(RS3), D19(RS2), D08
10. Population density.	535	559	D12
11. Effect of urbanization on health.	535	198	D12(RS3), D12
12. Life expectancy.	537	558	D09(RS2), D06
13. Enumerate the causes of high birth rate in India.	538	563	D10
14. Measures of fertility (fertility indices).	539	560	D05
15. What is total fertility rate.	540	561	D10(RS2), D16
16. Net reproductive rate.	540	561	J13(RS3), D16(RS3), J18(RS3), J08, J14
17. Define family planning.	542	565	J01, D02
18. Target couples.	544	566	J10
19. What is couple protection rate?	544	566	D12(RS3), D19(RS2), D16
20. Classify contraceptive methods.	545	566	J11
21. Conventional contraceptives/spacing methods of contraception (barrier contraceptives).	545	567	D09(RS2), J03
22. Describe the advantages and disadvantages of condom.	545	567	J06, D11
23. Intrauterine contraceptive device—advantages/ideal candidate.	546	570	D08(RS2), D14(RS3), J15
24. Copper T (mechanism of action).	547	570	D16
25. Postcoital contraception.	552	576	D14
26. List the important side effects of oral contraceptive pills.	552	575	D10
27. Enumerate (non-contraceptive) benefits of oral contraceptives.	553	574	J10, J14
28. (Absolute) contraindications of oral contraceptive pill.	554	575	D16(RS3), J17(RS3)



29. What are injectable contraceptives?	554	576	D00
30. Menstrual regulation	556	578	D08
31. What is menstrual induction?	556	578	D09
32. Medical Termination of Pregnancy Act, 1975—indications.	557	579	D11(RS2)
33. List the natural methods of contraception.	558	580	J12
34. Describe no scalpel vasectomy?	560	582	D01, D04
35. Pearl Index.	561	585	D01, D04, J17
36. Community need assessment approach.	566	—	D08(RS2)
37. Incentives under National Family Welfare Program.	566	851	J13(RS3)

## CHAPTER 10 PREVENTIVE MEDICINE IN OBSTETRICS, PEDIATRICS AND GERIATRICS

### Long Essays

1. What is under-five clinic? What are the activities of under five clinics?	—	533	J02
2. What is 'at-risk approach'? List the high-risk pregnancies in antenatal care and describe how you would prevent them.	578	511	D07
3. Describe the various methods of classifying 'low birth weight' babies and discuss the important risk factors and strategies for its prevention in a developing country.	587	519	J15
4. Discuss the various health problems encountered in 'children' in a developing country.	601	—	D14
5. Define maternal mortality rate (MMR). Discuss the 'causes/determinants' for high MMR in India (developing countries). Describe 'preventive' and 'social' measures to control MMR.	610	540	J12(RS2), J17(RS3), J18(RS3), D19(RS2), J01, D03, D12, D15, D16

6. Explain causes for reduction of maternal mortality in India.	615	640	J12
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7. Enumerate the maternal and child health indicators. Define perinatal mortality rate. Write the causes and measures to reduce perinatal mortality rate in India.	610, 617	640, 542	D11(RS2), J13(RS3), D17(RS3), J05
8. List and briefly describe the various mortality rates of infancy and childhood. Describe the causes of infant mortality in India, and briefly describe three strategies to reduce infant mortality.	610, 622	540, 543	J17
9. How many infants are dying in India? Why? Explain the causes. How do you prevent these deaths?	622	543	J11(RS2), J04
10. Define infant mortality rate. Describe role of under-fives clinics to reduce infant mortality.	622	543, 533	D10(RS2)
11. What are the common causes of under-five mortality in India? Describe the measures taken to ensure child survival in India.	627	—	D07(RS2)
12. Enumerate the causes of under-five mortality in India. Describe the various national programmes for protection of preschool children in India.	627	544	J11
13. Describe in detail importance and objectives of school health services in India. Mention various aspects of school health services which are to be provided.	633	537	D07
14. Discuss briefly the functions and organizational aspects of Integrated Child Development Services (ICDS) scheme.	647	546	J10(RS2)
15. Describe the various health problems (common organic, psychiatric and social problems) of the aged. Suggest the remedial measures. How can their health and welfare be promoted?	650	661	J09(RS2), D18(RS3), J06
16. What are the common problems of the elderly? Write about the social security measure for the elderly in India.	650, 759	661, 207	D16(RS3)

### Short Essays

1. Breastfeeding vs artificial feeding.	—	—	D14
2. Under-five clinic—aims and objectives/ main activities and benefits.	—	533	J08(RS2), D09(RS2), J06, D10, J14



3. What do you understand by the term — illegitimate child?	—	—	D09
4. Primary care services for the aged.	—	662	J08(RS2)
5. Scope of 'social obstetrics'.	573	—	J15
6. Discuss in brief the 'mother and child' health problems in India.	574	504	D14
7. Antenatal care—objectives/components (essential elements).	575	505	D10(RS2), J04, D13
8. Explain the concept of 'risk factors' and give examples of 'risk approach' to antenatal care (high-risk pregnancy).	578	511	J01, D02, D04, J06, D10, J12, D14, J17
9. Discuss the specific health protection given to the antenatal cases.	579	509	D12(RS3), D19(RS2)
10. What is mother craft clinic?	579	511	J10
11. Postnatal care—components/contents of health education.	582	514	D17(RS3), D18(RS3), D03
12. Complication in postnatal period.	582	515	J19(RS3)
13. Discuss the objective and steps of early neonatal care.	584	516	D15
14. Newborn screening.	587	—	J18(RS3)
15. How will you identify 'at-risk infants'.	587	518	D08(RS2)
16. Low birth weight babies—prevention.	589	519	J14(RS3), J07, D13
17. Define exclusive breastfeeding. Enumerate the benefits of breastfeeding.	591	525	J13
18. Is it necessary to universally breastfeed the babies? Why?	591	525	J11(RS2)
19. What is weaning and which weaning foods you would recommend for slum children?	592	525	J12
20. Baby-friendly hospital initiative (BFHI) and characteristics of baby-friendly hospital.	592	529	J02, J03, D11
21. Growth monitoring in children and its objectives.	593	531	D07, D11

22. What is the importance of anthropometric nutritional status indicators in preschool children?	595	531	J01
23. Anthropometric measurements in children (to assess nutrition).	595	178	D09(RS2), D03, J12
24. Describe growth chart (used in India) and write its uses (road to health card).	599	531	J19(RS3), J02, D08, J11
25. Write about various child health problems.	601	—	D08
26. Write about the nutritional problems of under five children in your state.	601	—	D05
27. Indicators of MCH care.	610	540	D09(RS2), J18(RS3)
28. Write the formula for the calculation of maternal mortality rate. What are the problems that kill mothers in India?	610	540	J11(RS2)
29. Maternal mortality rate—causes.	612	540	J09(RS2), J09
30. Define perinatal mortality rate? Enumerate the various causes of perinatal mortality in India. Write briefly the measures taken to reduce the same.	617	542	D12(RS3), D08, J13, J14
31. Infant mortality—causes/Factors affecting.	622	543	D09
32. Integrated management of a sick child.	631	894	J08(RS2)
33. Classification and management of illness in young infant.	631	892	D19(RS2)
34. Write the problems of the school age group. How are they being addressed?	633	537	D06, D09, J15
35. School health program (service)—objectives, brief functions, components (different aspects), organization.	633	537	D13(RS3), D00, D01, J05, D05, J10, D13, D14, D15
36. Screening of school children under school health program.	633	537	D07(RS2)
37. What are the causes of mental handicap?	636	535	J07
38. Primary prevention of disabilities in handicaps.	638	536	D08(RS2)



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39. Juvenile delinquency—causes and preventive measures.	639	536	D12(RS3), J09, J12, D15, D16
40. Street children.	642	549	D15
41. Add a note on Child Labor Act, 1986.	644	—	J10
42. What is child placement?	645	536	D02, D04
43. Child guidance clinic.	645	537	J17(RS3)
44. Juvenile Justice Act.	646	—	D17(RS3)
45. ICDS program/integrated child development services scheme—organization, beneficiaries, package of services (benefits).	647	546	J08(RS2), D18(RS3), J19(RS3), D13
46. What is the 'package of services' provided through ICDS?	647	547	J12, J14
47. Enumerate the beneficiaries and the services under (ICDS) integrated child development scheme.	647	546	D05
48. What are the activities of an Anganwadi center?	647	547	D00
49. Write about the organization and benefits under integrated child development services (ICDS) scheme.	647	548	D06
50. Anganwadi worker (AWW)—functions.	647	548	D08(RS2), D10(RS2), J11
51. Write common health problems (chronic) of geriatric population (aged woman) and measures taken to prevent these in India.	650	661	J13(RS3), D14(RS3), J01, D02, D04, D07, J08, J10, J11
52. Enumerate the psychological problems in elderly.	651	662	D09
53. Write briefly about the health status of elderly in India.	651	661	J13
<b>Short Answers</b>			
1. How do you manage postpartum hemorrhage in a community health care?	—	—	J11(RS2)
2. Write the treatment of reproductive tract infections.	—	—	J05

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3. Under-five clinic.	—	533	J13(RS3), J19(RS3)
4. What are home available fluids?	—	331	J01
5. Justify 'mother and child' being considered as one unit.	572	504	J15
6. Antenatal care.	575	505	D08(RS2)
7. What advice is given during antenatal period?	578	508	D11
8. Preventive measures for anemia in pregnancy.	579	510	D05
9. Congenital syphilis.	580	—	D19(RS2)
10. What is rooming in?	581	517	J07
11. Mention the objectives of postpartum care. What are the complications which may arise during postpartum period?	582	514	D12(RS3)
12. Mention the complications of 'postpartum' (postnatal) Period.	582	515	J06, D10, J13, D14
13. Early neonatal care.	584	516	D09(RS2)
14. Write in brief about screening of newborn infants.	587	—	D11
15. Crelinism.	587	—	J18(RS3)
16. Low birth weight—define, causes.	587	519	J02
17. Kangaroo mother care.	589	521	J19(RS3)
18. What is exclusive breastfeeding? Enumerate the advantages.	591	525	J12(RS2), J17(RS3), J01, J05
19. Rational for exclusive breastfeeding.	591	525	J11
20. Advantages of 'breastfeeding'.	591	525	J15
21. List the weaning food.	592	525	D00, D02
22. Criteria for baby-friendly hospitals initiatives (BFHI).	592	529	J09(RS2), D14
23. Growth chart.	597	531	D09(RS2)
24. Draw a road to health card.	599	533	D03
25. Uses of growth chart (road to health card).	600	533	J12(RS2), D12(RS3), D02, J08, J10, D15



26. Maternal mortality rate.	610	540	D05
27. Cause of maternal mortality.	612	540	J13(RS3)
28. Enumerate the social factors which influence maternal mortality.	613	540	D10
29. Enumerate indicators of child health care.	616	540	D10(RS2)
30. Perinatal mortality rate and its importance.	617	542	J08
31. List the medical causes of neonatal mortality in India.	619	542	J07
32. Infant mortality rate.	622	543	J16(RS3), D06
33. Causes of infant mortality in India.	623	544	D07
34. School health services.	633	537	J05
35. School health program—objectives/ components.	633	537	J08(RS2), J10(RS2), D11(RS2), D14(RS3), D11
36. Health education in schools.	635	539	D17(RS3)
37. Behavioral disorders in a child.	639	—	J04, J11
38. Juvenile delinquency—causes and preventive measures.	639	536	J10(RS2), J12(RS2), J17(RS3), J18(RS3), D01, D03, D04, D06, J12
39. Street children.	642	549	J09(RS2)
40. Child trafficking.	644	—	D19(RS2)
41. Integrated Child Development Services (ICDS).	647	546	J14(RS3)
42. Describes the services under (functions of) ICDS scheme.	647	547	D03, J05
43. Anganwadi worker—criteria for selection/ functions.	648	548	D13(RS3), J17(RS3), J02
44. Health problems of adolescents (girls).	649	670	D08(RS2), D03

45. Health problems of old age/geriatric population (health-care needs of the elderly)—elderly males/elderly females.	650	661	D07(RS2), J10(RS2), D10(RS2), J19(RS3), J05, D12, D14, J15, D15
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46. Life style and healthy aging.	651	662	D19(RS2)
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## CHAPTER 11 NUTRITION AND HEALTH

### Long Essays

1. What are micronutrients? Describe their role in nutrition and discuss the management of diseases due to their deficiency.	666, 672	—	D19(RS3)
2. Describe the manifestation of vitamin A deficiency and discuss the strategy of combating the problems at the national level in India.	672, 697	138, 165	D14
3. What are the sources and functions of iodine? Enumerate the spectrum of conditions under iodine deficiency disorders. Discuss about the components of iodine deficiency disorders control program.	681, 699	144, 171	J13(RS3)
4. Enumerate the nutritional problems in public health. Describe in detail protein-energy malnutrition with respect to its symptoms and preventive measures.	695	162	D12(RS3)
5. What is protein-energy malnutrition? Describe the Ecology/epidemiology, classification, etiology, signs, symptoms, prevention and control of protein-energy malnutrition.	695	162	D13(RS3), J15(RS3), J06, J14, D16
6. Explain role of diet in various diseases. Add a note on 'diet and cancer'.	702, 704	—	D11
7. Describe the methods of assessment of nutritional status of a community with their merits and demerits.	705	177	J10(RS2), J07, D07, D12, D13



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8. Define anthropometry and its role in classifying nutritional disorders in children and their management.	705	178	D10
9. What are the different methods of conducting diet survey and compare their relative merits and demerits.	706	180	D05
10. Define malnutrition. Describe the causes and clinical features of severe forms of malnutrition. How will you prevent malnutrition in children?	708	162	J12(RS2)
11. Explain the influence of socio-economic and cultural factors on the nutritional status of children in India.	708	632	J03
12. What are the sociocultural factors contributing to PEM in India? What measures Government of India is taking to control malnutrition?	708	632	D08(RS2)
13. Give an account of commonly occurring food toxicants in India and their prevention.	713	173	D06

## Short Essays

1. Supplementary action of proteins.	667	134	D15
2. What are essential fatty acids? Enumerate their functions.	667	135	J03
3. Enumerate the water-soluble vitamins and describe any one in detail.	672, 675	137	D18(RS3)
4. Vitamin A—dietary sources/signs and symptoms of deficiency (xerophthalmia) and preventive measures.	672	137	J02, D12, J13
5. Rickets.	674	139	D10
6. Pellagra.	676	141	J18(RS3)
7. Dietary antioxidants.	683	146	D15(RS3)
8. What are alcoholic beverages? Can they give 'empty calories'? Why?	688	151	J11(RS2)
9. Egg—a reference protein.	691	150	D15(RS3)
10. Balanced diet and its components.	694	152	D15(RS3), D02
11. What is balanced diet? Write briefly about the recommended dietary goals.	694	152	J13(RS3)

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12. Dietary goals (prudent diet).	694	153	D16(RS3), D07
13. The Food Guide Pyramid.	695	—	J14(RS3)
14. National Vitamin A Prophylaxis Programme (prevention of vitamin A deficiency disorders).	698	165	D12(RS3)
15. Iron deficiency anaemia (nutritional anemia) and its prevention (anemia prophylaxis program).	698	166	J08(RS2), D14(RS3), J15(RS3), D16(RS3), J05
16. Spectrum of iodine deficiency disorders and its health hazards and their prevention.	699	171	J09(RS2), D14(RS3), D15(RS3), J17(RS3), D06, D08
17. Lathyrism (define, prevention).	701	173	J17(RS3), D19(RS3), D15
18. What is neurolethyrism? Mention the causes, clinical features and interventions for control of the problem.	701	173	D09(RS2), J13(RS3), D11, J17
19. Principles for a diabetic diet.	703	490	J11
20. Discuss the role of diet (nutritional factors) in the causation of cancer.	704	—	J09, J14
21. Discuss various methods of nutritional assessment of a community.	705	177	J15(RS3), J09
22. Anthropometry.	705	178	J09(RS2)
23. Dietary surveys (assessment of dietary intake)—methods.	706	180	D00, J02, J03, J04, D04, J08, D09
24. Nutritional surveillance.	707	181	D10(RS2)
25. Comparison of (difference between) growth monitoring and nutritional surveillance.	707	182	J09(RS2), J10(RS2), J13(RS3)
26. Discuss causes of malnutrition.	708	162	J12
27. Contribution of cultural, social and ecological factors to PEM in the community.	708	632	D07(RS2)

28. Discuss "cultural influences" on diet, with examples.	708	—	J15
29. Milk-borne diseases.	711	160	J19(RS3), J09
30. Pasteurization of milk—methods, tests to verify.	711	160	J09(RS2), D09(RS2), D10(RS2), D17(RS3), D18(RS3), D15
31. Minimum standards required for slaughter houses (inspection of slaughter house from hygiene point of view).	712	161	D07, J10
32. How would you educate food handlers regarding handling of food?	713	157	D00, D01
33. Food toxicities—food toxicants and the consequent diseases.	713	173	J19(RS3), J02, D05, D09, D10
34. Food fortification.	715	158	D09(RS2), D08
35. Define the terms: (a) Food adulteration and (b) Food fortification.	715	158	
36. Prevention of Food Adulteration Act 1954.	715	159	D07(RS2), J12(RS2), J01, D13
37. Enumerate the community nutrition programs.	717	771	D19(RS3), J08
38. Mid-day school meal and its benefits.	717	539	J06(RS2), D01
<b>Short Answers</b>			
1. What is 'Hyderabad mixture'?	—	165	D11
2. Classification of PEM (protein-energy malnutrition)—Gomez classification.	—	163	J03
3. Differentiate between supplementation and fortification.	—	—	J05
4. Food supplementation.	—	—	J11
5. Write about supplementary nutrition.	—	548	D08
6. List the essential amino acids.	666	133	D10
7. Importance of 'poly-unsaturated fatty acids' (PUFA) in diet.	667	135	D14

8. Name three important sources of dietary fibers.	671	137	J01
9. List four micronutrient deficiency disorders in India.	672	—	D17(RS3)
10. Vitamin A deficiency—manifestations (xerophthalmia).	672	138	D16(RS3), D10
11. Keratomalacia.	673	138	D18(RS3)
12. Schedule for vitamin A prophylaxis.	673	165	D00, J01, D01, D04, J07
13. Write in brief about deficiency of thiamine in diet.	675	140	J10
14. Write briefly about ber-beri.	675	140	J17(RS3)
15. Which vitamin deficiency can cause psychosis? Why?	676	140	J11(RS2)
16. What are trace elements in nutrition?	678	143	D02, D10
17. Name four rich sources of dietary iron.	679	143	D12
18. Name three important items which promotes absorption of dietary iron.	680	143	J03
19. Goitrogens.	681	144	J14
20. Dark green leafy vegetable and nutrients present in them.	685	148	D08(RS2), D06
21. Characteristics of reference adult Indian woman.	689	151	J16(RS3), D01
22. Dietary needs of pregnant women.	690	152	D08(RS2)
23. Reference protein.	691	150	D00
24. Enumerate the dietary goals recommended by WHO.	694	153	D14(RS3)
25. Balanced diet.	694	152	J12(RS2), D19(RS3)
26. Mid-upper arm circumference.	697	179	D08(RS2)
27. What is the dose of vitamin A solution for a 9-month-old child? Why?	698	165	J11(RS2)
28. Iodized salt (health benefits).	700	172	J14(RS3), D02
29. Fluorosis (endemic).	701	145	D18(RS3), J11



30. Lathyrism.	701	173	J08(RS2), D13
31. Assessment of nutritional status.	705	177	D17(RS3), J14
32. Assessment of dietary intake (diet survey).	706	180	J09(RS2), D16
33. Differentiate between monitoring and surveillance with examples.	707	182	J15(RS3)
34. Milk hygiene.	711	160	J19(RS3)
35. Milk-borne diseases.	711	160	D08
36. What is pasteurization of milk? What are the tests used to check for the efficiency of pasteurization (methylene blue test)?	711	160	J11(RS2), J13(RS3), J14(RS3)
37. Method of pasteurization of milk (HTST method).	711	160	J07, J12
38. Write short notes on aflatoxins.	713	175	D10(RS2)
39. Epidemic dropsy.	714	174	D16(RS3), J13, J15
40. Endemic ascies.	714	175	D12(RS3)
41. What is food fortification?	715	158	D00
42. Food fortification and food enrichment.	715	158	J12(RS2)
43. What is food adulteration? Give examples.	715	158	J10(RS2), D13(RS3), D14(RS3)
44. Food additives.	714	156	D14
45. Name the food standards.	716	159	J06, D07
46. Classify and list national (community) programs in nutrition.	717	771	D10(RS2), J12
47. Balwadi nutrition program.	717	846	D16(RS3)
48. School (mid-day) meal program— principles, composition.	717	539	D10(RS2), D07

## CHAPTER 12

## SOCIAL SCIENCE AND HEALTH

## Long Essays

1. Define family. Explain the types of families. Briefly explain the function of families.	738	630	D01
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2. Describe in brief the role of family in health and disease.	740	632	J05
3. Describe social factors influencing the health of people.	742	637	J10
4. Discuss the role of cultural factors influencing health and disease.	742	632	D18(RS3)
5. What is social security? Describe the benefits under ESI scheme.	758	207, 205	D09(RS2)

## Short Essays

1. What is marriage counseling?	—	—	J03
2. How would you do counseling for a newly married couple for family planning?	—	—	D07(RS2)
3. Write the classification of socioeconomic status for rural area.	—	636	D03
4. Common health problems among slum dwellers.	—	638	J15, J17
5. Describe 'social control mechanisms'.	727	633	J14
6. Discuss in brief the health problems arising out of 'social and economic development' in a developing country.	728	638	D14
7. Acculturation—effects, role.	728	630	J03, J06, J10
8. Role of emotions in health and disease.	731	—	D18(RS3)
9. Discuss briefly different types of 'learning'.	733	—	D14
10. Family life cycle.	738	630	J09
11. Define family. What are the functions of a family?	738	630	J13(RS3), J17(RS3)
12. Role of family in health and disease.	740	632	D11(RS2), J18(RS3), D00, D06
13. Social and cultural factors affecting health and diseases.	742	632, 637	D10(RS2), D13(RS3), D07, D13
14. What is social stratification? Discuss how social class affects health and utilization of health services.	744	634, 637	J15(RS3), J02
15. Describe the relation between disease and social condition.	747	637	J01, D01

	PARK	SYKNT	
16. Consumer Protection Act.	750	917	J13
17. Operational research.	752	643	J08
18. Diseases of poverty.	756	637	D08(RS2)
19. Social security.	758	207	J14(RS3), J19(RS3)
<b>Short Answers</b>			
1. What is socialized medicine?	—	—	J06, J12
2. Differentiate the crowd from family.	—	—	D00
3. Modified Prasad's classification.	—	634	D08(RS2)
4. What is poverty line?	—	637	J02, J12
5. Social security available for elderly population.	—	207	D11(RS2)
6. Health problems in urban slum/list six major urban health problems.	—	638	J04, D16
7. Define anthropology.	726	629	D06
8. What are the two aspects of sociology?	726	629	J03
9. Socialization.	727	633	D18(RS3)
10. Social control mechanisms.	727	633	J18(RS3)
11. Acculturation.	728	630	J12(RS2), J13(RS3), D02, D12, D13, D14
12. Social pathology.	729	637	D05, J08
13. Cognitive learning.	733	—	J14
14. Intelligence quotient (IQ).	735	535	D18(RS3), J17
15. Categories of mental retardation.	735	535	J18(RS3)
16. Types of families.	739	630	J13, D15
17. Nuclear family.	739	630	J08(RS2)
18. What are the functions of the family?	740	631	D14(RS3), J01
19. Broken family—define, reasons.	741	630	J10(RS2), J02
20. Problem family.	742	631	D11
21. Cultural factors in health and disease.	742	632	J09

	PARK	SYKNT	
22. What are the social factors affecting health?	742	637	D12
23. Write about medicosocial worker.	749	643	D12(RS3), J08, D10
24. Social security.	758	207	D17(RS3)
<b>CHAPTER 13</b>			
<b>ENVIRONMENT AND HEALTH</b>			
<b>Long Essays</b>			
1. Define safe water. Enumerate the sources of water. What are the various methods of purification of water on small scale?	766, 776	21, 29	D13(RS3)
2. What are the causes of water pollution? Write in detail about rapid sand filtration method of water purification.	770, 773	25	D15
3. What are the various methods of purification of water and mention clearly about household purification of water.	771, 776	24, 29	J19(RS3)
4. What are the guidelines for drinking water quality—criteria and standards? Describe each of the aspects in brief.	779	—	J08
5. Air pollution—sources, effects and prevention and control.	793	42	J18(RS3), J02
6. Define refuse and discuss the methods of solid waste disposal. Write in brief about controlled tipping.	813	65	J09, D11
7. Enumerate the vector-borne diseases and add a note on "prevention and control".	828	98	J14(RS3)
8. Explain the chemical control of arthropods of public health importance.	828	103	D07(RS2)
<b>Short Essays</b>			
1. What should be the thickness of plastic bags should they be permitted? Why?	—	—	J11(RS2)
2. Prevention of indoor air pollution in India.	—	—	D17(RS3)
3. What is green house effect?	—	43	D19(RS3), J05
4. What is ozone depletion?	—	43	D03



## PARK SYKNT

5. Measures for safe disposal of sullage (in village)	—	75	D08(RS2), D02
6. Describe soakage pit with a diagram.	—	75	J02, J07
7. Describe a sanitary well.	769	23	D09, J13
8. Enumerate water-borne diseases and preventive measures, for the same.	770	23	D09
9. Mention 'water-borne' diseases and write about the guidelines for 'bacteriological quality' of drinking water.	770, 780	23, 38	D14
10. What are the steps of water purification?	771	24	D02
11. Distinguish between rapid and slow sand filter.	774	27	J07
12. Chlorination of water—principles.	774	27	J16(RS3), D13
13. Write in brief about break point chlorination.	775	28	D16(RS3), J10
14. What is residual chlorine? Explain free residual chlorine with a diagram. Is it necessary to have residual chlorine (role of residual chlorine in drinking water)?	775	28	J11(RS2), J02, J04, D04
15. What are the various methods used for purification of water on a small (domestic) scale?	776	29	J10(RS2), D12(RS3), D18(RS3), D01, D07
16. Methods of household disinfection of water.	776	29	D11(RS2)
17. Write how you will disinfect a well in a village during an epidemic (steps in well chlorination).	777	31	J13(RS3), D05
18. Surveillance of drinking water quality.	779	—	J16(RS3)
19. What are bacteriological standards of drinking water for rural community?	780	38	J05, D06
20. What are the methods for determining the bacteriological quality of water (faecal contamination of drinking water)?	786	38	D09(RS2), J04, D04
21. Write the presumptive coliform test.	786	39	D03, J14
22. Describe the different methods for removal of hardness of water.	787	35	J15(RS3)
23. Defluorination.	787	145	D10

## PARK SYKNT

24. Indices of thermal comfort.	792	40	D07(RS2), D16
25. Thermal comfort zone—define, range of corrected effective temperatures for evaluating comfort zone.	792	42	D11(RS2), D15(RS3), J03, D10
26. Air pollutions—major 'air pollutants', sources and adverse health effects/prevention and control/monitoring (indices of air pollution).	793	43	J10(RS2), D14(RS3), D05, D12, D14, J15
27. Ventilation—standards of ventilation/types.	798	44	J12(RS2), J10, D10, J13
28. How ventilation and overcrowding play a role in disease transmission?	798, 812	44, 56	J04, D04
29. Lighting standards.	801	—	D16(RS3)
30. Noise pollution—effects on health (noise-induced hearing loss)/control and prevention.	802	46	D08(RS2), D15(RS3), D02, J04, D04, J05, D06, J10, J12, D12, D16
31. Radiation—hazards (biological effects) and prevention.	804	52	D10(RS2), J18(RS3), J19(RS3), J02, J06, D12
32. Criteria for healthful housing.	810	55	D07(RS2)
33. Write briefly about standards of housing.	811	55	D13
34. Housing standards for rural areas.	811	56	D08(RS2), J11
35. Overcrowding and its effect.	812	56	D13(RS3), D16
36. How you will decide the overcrowding in a house?	812	56	J05
37. List the methods of disposal of solid waste.	814	65	J18(RS3), D07, D15
38. Why human faecal matter needs to be treated before disposal?	816	67	J11(RS2)
39. Sanitation barrier.	816	67	D19(RS2), J11, J17
40. Septic tank.	820	70	J14

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	PARK	SYKNT	
41. Oxidation pond.	825	79	D11(RS2), J08
42. Write about the different methods of control of arthropods.	828	102	J13(RS3)
43. Integrated vector control (Culex mosquito).	829	109	J10(RS2), D11(RS2), D13(RS3), D14(RS3), J16(RS3), J01, J14
44. What are various mosquito control measures?	832	102	D10(RS2), J08
45. Explain the antilarval measures in mosquito control.	832	102	D00
46. Write the name of insecticides which are recommended for control of vector of dengue.	832	104	D05
47. Write short notes on residual insecticides.	833	129	D09(RS2)
48. Explain the environmental control of house fly.	834	112	J03
49. Diseases transmitted by soft ticks.	840	122	D16(RS3)
50. Cyclops—control.	842	128	D07(RS2)
51. Give the classification of insecticides.	843	—	D06
52. Rodents—diseases associated/ antirodent measures).	846	—	J06, D07
<b>Short Answers</b>			
1. Nalgonda technique.	—	145	D15(RS3)
2. Fecal borne diseases.	—	—	D08
3. Soakage pit—define, mechanism of action.	—	75	J08(RS2), D11
4. Mosquitoes and immune diseases.	—	—	J19(RS3)
5. List out the differences between mosquito and sand fly.	—	—	D00
6. What are biocides?	—	—	J05
7. Advantage and limitation of insecticides as method of vector control.	—	—	D16(RS3)
8. Safe and wholesome water.	766	21	J06, D07, D12

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	PARK	SYKNT	
9. Mention the difference between a shallow well and deep well.	769	23	D06
10. Required standards for a sanitary well.	769	23	J12
11. Back washing.	774	26	D16(RS3)
12. Residual chlorine (significance) and its testing in the community.	775	28	D13(RS3), J18(RS3), J11, J14
13. What is break point chlorination?	775	28	D09(RS2), J12(RS2), D00, D01, J09
14. Residual chlorination.	775	28	D17(RS3)
15. Superchlorination of water.	775	28	D06, D09
16. How do you determine the chlorine in drinking water? Orthotoluidine test.	775	29	D09(RS2), J04, D04, D08, D15
17. Stabilized bleach.	776	27	D11(RS2)
18. Methods of household purification of water.	776	29	D19(RS3)
19. How will you determine volume of well water?	777	32	J10
20. How you will determine the amount of bleaching powder required to disinfect a well in a remote village?	777	32	D03
21. Double pot method.	778	33	D10
22. Surveillance of drinking water quality.	785	36	J17
23. How you will determine the most probable number of coliform organisms in drinking water (presumptive coliform test).	786	39	J01, J05, D09
24. Horrock's test.	788	32	J10(RS2)
25. Rain water harvesting.	790	36	D15(RS3)
26. Indices of thermal comfort.	792	41	D16
27. Comfort zones.	792	42	D07
28. Indicators of air pollution.	796	44	J08(RS2), D10(RS2)
29. Effects of air pollution.	797	43	D07(RS2)
30. Hazards of noise pollution.	802	46	D01, D15

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## PARK SYKNT

31. What is noise-induced hearing loss?	802	46	D00
32. Non-auditory effects of noise on health.	802	46	J11
33. Effects and Prevention of noise pollution.	802	46	J15(RS3)
34. Measures for the control of noise pollution.	803	47	J13(RS3)
35. What is ionizing radiation?	804	51	D02
36. Biological effects of radiation (effects of radiation on health).	804	52	J12(RS2), J14(RS3), J07, J08
37. Effects of atmospheric pressure on health.	806	58	J09(RS2)
38. Health hazards due to exposure to high temperature.	807	61	D05
39. Kala thermometer.	807	64	D15(RS3)
40. Effects of heat stress.	807	62	J18(RS3)
41. What is heat hyperpyrexia?	808	—	J01
42. Global warming.	808	889	D18(RS3)
43. Waste disposal in urban areas.	814	65	J19(RS3)
44. Composting.	815	66	J18(RS3), D19(RS3)
45. What is sanitary barrier?	816	67	J08(RS2), J13(RS3), J05, D14
46. List out four criteria of a sanitary latrine.	817	67	D01
47. Mention two uses of water seal in a water seal latrine.	818	68	J03
48. What are the methods of sewage disposal.	823	76	D10(RS2)
49. Oxidation pond.	825	79	J11, J17
50. Write five vector-borne diseases with names of vector.	828	98	J04
51. What is biological control of vectors?	828	104	J04, D04, J13
52. Integrated vector control measures	829	109	J15(RS3)
53. Aedes mosquitoes and disease.	831	106	D13(RS3)
54. What is Aedes aegypti index?	831	393	J13(RS3), D09
55. Antimosquito measures.	832	102	D15(RS3)

## PARK SYKNT

56. Environmental anti-larval measures.	832	102	D08(RS2)
57. Residual insecticides.	833	129	J03, D09
58. Diseases transmitted through house flies.	834	112	D08
59. List out the public health importance of sand fly.	836	113	J01
60. List out the diseases transmitted by lice.	837	119	D01
61. What are flea indices?	839	118	J02, D08, D13
62. Mention tick-borne diseases.	840	122	J11(RS2)
63. Write briefly on itch mite.	841	125	J09
64. Prevention of scabies.	842	126	D19(RS3), J07
65. Discuss the mechanism of action, uses and public health importance of dichlorodiphenyltrichloroethane (DDT).	843	105	J13
66. List the diseases transmitted by rats.	846	—	D07
67. What are rodenticides?	847	—	D07(RS2), D03
68. Enumerate the important zoonotic diseases.	848	240	D10(RS2)

## CHAPTER 14

## HOSPITAL WASTE MANAGEMENT

## Long Essay

1. What are various methods of treatment and disposal technologies for health-care waste?	850	85	D09(RS2)
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## Short Essays

1. How biomedical waste is categorized? How category No. 3 is disposed off?	—	83	D11
2. What is category No. 3 of biomedical wastes and how it is treated/disposed?	—	83	J07
3. Health hazards of health-care waste.	850	80	J09(RS2)
4. Categories of Biomedical waste in India.	853	83	D17(RS3)
5. Write the different containers and their colors for disposing the hospital wastes.	853	83	J04, D04

**Short Answer**

050 — D10(RS2)

1. Genotoxic waste.

### CHAPTER 15 DISASTER MANAGEMENT

**Short Essays**

1. Training in disaster management.

— — D08

2. What is a disaster? Enumerate the different types of disasters.

855 877 J19(RS3), D00, D01

3. Disaster cycle.

857 878 D18(RS3), D14

4. Aspects of disaster management.

857 878 D15

5. What are short-term effects of disaster?

856 877 D11

6. List the ten health/medical activities during disaster management/disaster mitigation.

858 879 J01, D02, D04, D11

7. What is disaster preparedness? List six components of disaster preparedness.

859 879 D12(RS3), J13(RS3), J02

8. What are the health and environmental problems due to floods?

860 880 D10

9. Disaster management in floods.

860 881 D17(RS3)

10. Man-made disasters and its preventive measures.

862 878 D18(RS2), D07

11. Disaster management in India.

862 — J14(RS3)

**Short Answers**

1. Disaster—define/types.

855 877 D07, D14

2. Disaster cycle.

857 878 J15(RS3)

3. What is 'triage'. Scope of 'triage' in dealing with emergencies/disaster management.

857 879 J13(RS3), D14(RS3), J16(RS3), D16(RS3), J17(RS3), D09, D13, D15

4. Disaster (earthquake) mitigation in health sector.

858 879 D09(RS2), D11(RS2), D13(RS3), J14

5. Disaster preparedness.

859 879 D12

6. Pre-disaster phase of disaster management.

859 879 J08(RS2)

7. Man-made disasters.

862 878 J18(RS3)

### CHAPTER 16 OCCUPATIONAL HEALTH

**Long Essays**

1. Classify occupational diseases. Describe the various measures for the prevention of occupational diseases.

866, 180, J16(RS3), 873 201 D07

2. Classify occupational diseases. Write in detail about the engineering measures to prevent occupational diseases.

866, 180, J15 874 201

3. Define occupational health. List the occupational hazards. Mention the legislative measures to prevent them.

866, 187, D10 876 204

4. What is pneumoconiosis? What are the factors that influence causation of pneumoconiosis? Describe the various types of pneumoconiosis and their health effects? What measures are taken to prevent it?

867 189 J12(RS2), D05

5. Define pneumoconiosis. How is silicosis caused and how is it prevented?

867 189 D00

6. What are the health hazards of workers in coal mines? What steps you would take to reduce the hazards?

867, 191 J08(RS2) 873

7. Describe in detail, the various health problems due to industrialization.

871 199 D17(RS3)

8. What are the laws meant for the protection of industrial workers? Write in detail about Factories Act, 1948.

876 204 D11(RS2)

9. Explain the differences between social assistance and social insurance. Enumerate the provisions under the Indian Factory Act.

876 208, 204 J02

10. Write in detail about the benefits available to the employees and employers under the Employees State Insurance (ESI) Act, 1948?

877 205 J13



## Short Essays

1. How can one prevent the hazards of agricultural occupation in India?	—	197	J09
2. Classify occupational diseases with examples.	866	188	J10(RS2)
3. Pneumoconiosis (name giving occupation where they occur).	867	189	D10(RS2), J15(RS3), J19(RS3), J05, D08, J14
4. Silicosis—epidemiology, manifestation and measures of control.	867	190	D13(RS3), D01, D06
5. Anthracosis	867	191	D15
6. General measures for control of pneumoconiosis.	868	192	J11
7. Outline causes, clinical features, management and prevention of lead poisoning (plumbism).	868	193	D11(RS2), J15(RS3), J18(RS3), D09, J15, D16
8. Occupational cancers.	869	195	D07(RS2), D10(RS2), J12(RS2), J04, D04, J08, D13 J14(RS3) J09(RS2), D01, J07 D17(RS3) J17(RS3), D09, J10
9. Occupational dermatitis.	870	196	J10(RS2), D16(RS3)
10. Explain the occupation hazards of agriculture workers.	870	197	D09(RS2), D01, J07 D17(RS3) J17(RS3), D09, J10
11. Prevention of industrial accidents.	871	198	J10(RS2), D16(RS3)
12. What is sickness absenteeism? Enumerate the reasons. Explain the significance of sickness absenteeism.	871	200	D09(RS2), D14(RS3), J09
13. Health problems due to industrialization.	871	198	D00, J06, D07, D11 D02
14. What (medical) measures can be taken to protect the workers health?	873	201	
15. Pre-employment medical examination.	873	201	
16. Explain the advantages of pre-placement and periodic medical examinations in occupational health.	873	201, 203	

17. Explain with examples, periodic medical examination.	874	203	J01, J02, J03
18. Provisions under Factories Act, 1948—health promotion/health safety and welfare provisions.	876	204	J08(RS2), J12
19. Employees State Insurance Act, 1948—benefits to employees (sickness/medical).	877	205	D10(RS2), J11(RS2), D12(RS3), J15(RS3), D19(RS3), D02, J04, D04, J05, J08, J11, D11, D12
<b>Short Answers</b>			
1. Occupational hazards of health-care professionals.	—	—	D17(RS3)
2. Ergonomics.	864	187	D19(RS3), J04, D04, J07, J15, D15
3. Effect of vibration on health.	865	188	J11
4. What is respirable dust?	866	189	D02
5. Define silicosis. How is it diagnosed?	867	190	D17(RS3)
6. Anthracosis.	867	191	D18(RS3)
7. What is bagassosis?	868	192	J10, D14
8. Asbestosis and control.	868	191	D08(RS2), J13(RS3)
9. Dust control measures in coal mines.	868	192	J12
10. Farmer's lung.	868	192	D09, J17
11. Lead poisoning (plumbism).	868	193	D10
12. Occupational cancers—enumerate, causes.	869	195	J10(RS2), D08, J13
13. Cancer in dye industries.	869	195	J11(RS2)
14. Occupational dermatitis—causes and prevention.	870	196	J09, J15
15. Occupational risk to farmers/agricultural workers.	870	197	D11(RS2), D12(RS3), D10(RS3)

16. Sickness absenteeism—define/ measures for prevention.	871	200	D14(RS3), J06, D11, D12, J14
17. Preplacement examination and its importance.	873	201	J08(RS2), D19(RS3), D15
18. List the engineering measures to prevent occupational diseases.	874	202	J18(RS3)
19. The Factories Act, 1948	876	204	D09
20. Employees State Insurance Act—benefits (medical/sickness/maternity)	877	205	D09(RS2), J16(RS3), J03

## CHAPTER 17 GENETICS AND HEALTH

### Short Essays

1. Genetic engineering	—	—	J18(RS3)
2. Chromosomal abnormalities.	882	657	D07(RS2)
3. Down's syndrome.	883	658	D13(RS3)
4. Write in brief the role of genetic predisposition in common disorders.	886	659	J10
5. DNA recombinant technology.	887	—	D16(RS3), D19(RS2)
6. What is population genetics?	888	657	J02
7. Prevention of genetic disorders (Klinefelter's syndrome).	888	659	D11(RS2), D12(RS3), J09, D11
8. What is eugenics?	888	659	D03, J04
9. Genetic counseling.	889	659	J18(RS3), D00, D01, J07, J14
10. Consanguinous marriage.	889	—	D10

### Short Answers

1. Difference between eugenic and euthenics	—	—	J14(RS3)
2. Enumerate Mendel's laws of inheritance.	883	657	D11(RS2)
3. Down's syndrome.	883	658	D18(RS3)
4. What is Klinefelter syndrome?	883	658	J07

5. Human genome project.	887	—	D07(RS2)
6. Population genetics.	888	657	D11(RS2)
7. Hardy Weinberg law.	888	—	J13(RS3)
8. Define the terms 'eugenics and 'eugenics'.	888	659	J17
9. Eugenics—application in medicine.	888	659	J04, D04, D05, D06, D10, D14, D15
10. What is euthenics?	889	659	D13(RS3), D19(RS2), J14
11. What is prospective genetic counseling?	889	659	D10

## CHAPTER 18 MENTAL HEALTH

### Short Essays

1. What are illusions, delusions and hallucinations.	—	—	J11(RS2)
2. What is primary mental health care and how is it implemented.	—	—	J12
3. Write the characteristics of mentally healthy individual.	892	—	J11
4. Warning signals of poor mental health.	893	—	J09(RS2)
5. Common mental health problems.	893	—	J13
6. What are the causes of mental ill health?	894	666	J08
7. Types of mental illness.	893	666	J14(RS3), D18(RS3)
8. Mental health services in India	895	—	D16(RS3)
9. Drug dependence/addiction.	895	674	D07(RS2), D10
10. Socioeconomic effects of smoking.	897	911	J16(RS3)
11. Adverse health effects of smoking.	899	911	D15(RS3), D19(RS3)
12. Factors associated with a high risk for drug abuse.	900	674	J18(RS3)



13. Role of legislation in reducing alcoholism in the society. 900 677 D17(RS3)

**Short Answers**

1. Warning signs of poor mental health. 893 — D08(RS2), D09(RS2), D10(RS2), D11(RS2), J16(RS3), J11
2. Causes of mental ill health. 894 666 J17
3. Mental health services in India 895 — J15(RS3)
4. What is comprehensive mental health program? 895 — J09
5. List the drugs causing dependence. 895 675 J06
6. Passive smoking. 898 676 J14(RS3)
7. Discuss the effects of tobacco use. What are the preventive measures? 899 911 J17(RS3)
8. Measures for prevention of smoking. 900 912 J14(RS3)
9. List the factors associated with a high risk for drug abuse. 900 674 D06, J13
10. Prevention of drug dependence. 900 676 J16(RS3)
11. Recommend solution for the problem of drug abuse in India. 900 676 D17(RS3)
12. Explain de-addiction. 900 676 J02

**CHAPTER 19****HEALTH INFORMATION AND BASIC MEDICAL STATISTICS****Long Essay**

1. What is sampling? Explain with suitable examples the different methods of sampling. 912 603 J16(RS3), D02, J05

**Short Essays**

1. What is the difference between standard deviation and standard error? — — D07
2. Explain cluster sampling with examples. — 605 J02, J12
3. Health information system—define, components and uses. 902 — J13(RS3), D01, J07, D11, J13

4. Enumerate various sources of health information system in India. Describe any one in detail. 903 588 D09(RS2), J11, D13
5. What are the different sources of health information? What are the disadvantages of hospital records. 903 588 J11(RS2)
6. Write briefly on census. 903 552 D02, D04, J08
7. Write briefly on sample registration system. 904 553 J13
8. Notification of diseases—list and its merits and demerits. 904 — D16(RS3), J06, J09, D14
9. Write merits and demerits of hospital records as source of health information. 904 588 J12
10. Medical record linkage. 905 238 J14(RS3), D16
11. National Family Health Survey. 906 553 D16
12. Bar charts. 907 590 J17(RS3), D15
13. What are the measures of central tendency? What are its limitations? 910 596 D10(RS2), D19(RS3), J01, D11
14. Statistical averages. 910 596 D12
15. What are the measures of dispersion? 911 597 J16(RS3), D00, D01, J07, J08
16. Standard deviation. 911 598 D15(RS3), D10
17. Normal curve and normal distribution—characteristics. 912 600 D14(RS3), D17(RS3), J12, J15
18. What is sampling? Enumerate the techniques (sampling methods/ techniques). 912 603 J17(RS3), D17(RS3), D09, J11, D15
19. Simple random sampling. 913 603 J17(RS3)
20. What is stratified random sampling? Illustrate with an example. 913 604 D13(RS3), J03, J10, D13
21. Sampling error. 913 606 J17

22. Describe briefly the various "tests of significance"	913	608	J08(RS2), D11(RS2), J17
23. Chi-square test.	915	613	D16
<b>Short Answers</b>			
1. Quantitative variables, give example of each.	—	589	D05
2. Meaning of the term "inter-quartile range"	—	—	D09(RS2)
3. Contingency table.	—	—	J09(RS2)
4. Law of probability.	—	599	D05
5. Cluster sampling.	—	605	D00
6. What is data? Write types with suitable examples.	902	587	D11
7. Distinguish between data and information.	902	—	D08
8. Write uses of health information system.	902	—	J12
9. Sources of health information.	903	588	D09(RS2), D08
10. Census as source of health information.	903	552	J10(RS2), D11, D13
11. What is vital statistics? Write its sources in India.	903	588	D11
12. Vital events—registration.	903	—	D12(RS3), J14(RS3), D18(RS3)
13. Birth and Death Registration Act of 1969.	903	917	D08(RS2), D16(RS3)
14. What is 'Lay reporting'?	903	—	J14
15. Sample registration system.	904	553	D17(RS3), J15
16. What is dual registration system?	904	—	J12
17. Hospital records—three drawbacks/five uses.	904	588	D00, D01, J02, D04
18. Record linkage.	905	238	J09(RS2), D11(RS2), D15(RS3), J16(RS3), J11

19. Bar diagram (Bar charts) and its uses.	907	590	D08(RS2), J10(RS2), J14(RS3), D15(RS3)
20. Histogram.	908	590	J08(RS2), J01, J12
21. Pie chart.	909	593	D00, D07, J15
22. What is spot map?	—	594	J13(RS3), D01, J07, D12
23. Measures of central tendency.	910	596	D14(RS3), J15(RS3), D03, J06, J12
24. Standard normal curve—properties/ draw.	912	600	D08(RS2), J17(RS3), J18(RS3), D06, J13, J17
25. Sampling methods/types.	913	603	D16(RS3), J19(RS3), J09
26. Stratified random sampling.	913	604	J08(RS2)
27. Sampling errors.	913	606	D09(RS2)
28. Name the tests of significance.	913	608	J18(RS3)
29. Chi-square test.	915	613	D15(RS3), J17(RS3)

## CHAPTER 20 COMMUNICATION FOR HEALTH EDUCATION

### Long Essays

1. Define health education and describe the various approaches and applications of health education.	920, 926	647	J09
2. What is health education? Discuss the principles of health education giving examples. Write briefly about the communication process. Enumerate the steps in planning for conducting a health educational session in a village.	920, 924, 917	647, 646	D11(RS2), J17(RS3)



3. What is health education? Discuss how you will organize a health education session on anemia for village women.	920, 930	647	J12
4. What are the contents and principles of health education?	923	648	J08
5. What is concept of information, education and communication? Describe in brief the various methods to deliver it.	926	646, 649	D03
6. Classify and describe the various methods of health communication. Enlist the advantages and disadvantages of the different methods.	926	649	J09(RS2), D17(RS3)

**Short Essays**

1. Effective methods of communication to youths.	—	—	J08(RS2)
2. Barriers of health communication and their prevention.	919	647	J10(RS2), J12(RS2), D12(RS3), D13(RS3), J15(RS3), J11
3. Functions of 'health communication'.	919	—	J14
4. Define health education. Describe six stages of adoption of new ideas and practices with one example.	920	647	D00, D02
5. Briefly discuss the various approaches to health education.	921	648	D09(RS2), D14(RS3)
6. Models of health education.	922	648	D19(RS3)
7. Enumerate the differences between health education and health propaganda.	922	648	D10(RS2), J06, J07
8. Principles of health education.	924	648	D08(RS2), J09(RS2), J13(RS3), J13, D13, J17
9. What is group health education? Write in brief about lectures.	927	650	J01
10. What is group health discussion? Write in brief about group discussion.	927	650	D16
11. What is group health education? Write in brief about role play.	928	652	J03
12. Discuss in brief the various health education methods for mass education.	929	654	D05

13. 'Mass approach' for health education (mass media).	929	654	D11, J14, D15
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**Short Answers**

1. What is an effective communication?	—	—	J05
2. Difference between seminar and symposium.	—	—	D05
3. Types of communication.	918	647	J16(RS3), J15
4. Barriers of communication.	919	647	D15(RS3)
5. List the functions of health communication.	919	—	D06
6. Health education and propaganda—difference.	922	648	J13(RS3)
7. Principles of health education.	924	648	D12
8. Different methods of health education.	926	649	J04, D04
9. Write modern methods of communication in medicine.	926	647	J11
10. Audiovisual aids in health education.	926	649	D11(RS2), J02, D09
11. Write advantages of individual approach in health education.	926	650	D11
12. Explain in brief what is a group discussion.	927	650	D12(RS3), J10, J14
13. Panel discussion.	928	651	J10(RS2), J16(RS3), J11, D14
14. What is role play?	928	652	J07
15. Symposium.	928	651	J12(RS2), D14(RS3)
16. Mass media for health education—advantages and disadvantages.	929	654	J14(RS3)
17. Enumerate the uses of Internet in medicine.	929	914	D02

**CHAPTER 21****HEALTH PLANNING AND MANAGEMENT****Long Essays**

1. What is meant by National Health Planning? Describe the steps involved in a planning cycle.	931	739, 735	D10
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2. Describe the various stage of planning cycle. 932 735 D06
3. Define management. Describe the management methods and techniques. 933 736 J09

**Short Essays**

1. Differentiate between a cost effective and cost benefit study. — — J04
2. Define objective, target and goal. 931 735 D09
3. Explain stages of planning cycle with a diagram. 932 735 J08(RS2), D08(RS2), D10(RS2), D13(RS3), D00, J01, J02, J03, D03, D05, J15, J17

4. Management techniques based on behavioral sciences. 934 — D11(RS2)
5. Describe cost benefit analysis. 934 737 D14(RS3), J06, J10
6. Input-output analysis. 934 — D16
7. Network analysis. 935 736 J14
8. Program evaluation review technique (PERT)—advantages. 935 736 D10(RS2)
9. Describe salient points of National Health Policy, 2002. 936 748 J10(RS2), D05
10. Write the recommendations of Bhore committee. 937 739 J19(RS3), J04, J12, D16
11. Write three recommendations of Mudaliar committee. 937 739 D03
12. Write the recommendations of Kartar Singh committee. 938 740 J05
13. Describe the purpose and recommendations of Shrivastav committee. 938 740 J10(RS2), J16(RS3), J18(RS3)
14. Rural health scheme. 939 — J08
15. Enumerate organizational structure of health system in India. 942 743 J15

16. Central health council and its functions. 943 744 J10, J11
17. Write in brief about role of Gram Sevak in Panchayat Raj. 946 746 D09
18. List out the basic steps involved in evaluation. 946 — J09(RS2)

**Short Answers**

1. Write differences between cost-effective and cost-benefit analysis. — — D11
2. What is pre-planning? 932 — D13
3. Planning cycle and its steps. 932 735 J07, J09
4. Management by objectives (advantages). 934 — D07(RS2), J12
5. Enumerate 'quantitative' methods of management. 934 — D15
6. What is cost benefit and cost effectiveness? 934 737 J01, D02
7. Cost benefit analysis. 934 737 D12, J14
8. Cost effective analysis. 934 737 D13(RS3)
9. Input-output analysis. 934 — J09(RS2), D10
10. Network analysis. 935 736 J10(RS2), J12(RS2), J17(RS3)
11. Program evaluation review technique. 935 736 D16(RS3), D16
12. Explain through a line diagram what is critical path method. 935 737 J07, J08, D09, D14
13. Planning-programming-budgeting system. 935 — D11(RS2)
14. Recommendations of Bhore committee. 937 739 D13(RS3)
15. Recommendations of Shrivastav committee, 1975. 938 740 J09(RS2), D12(RS3)
16. Five-year plans. 939 740 J08(RS2)
17. 'Evaluation' of health programme (planning)—components/general steps. 946 — J11, J15



## CHAPTER 22 HEALTH CARE OF THE COMMUNITY

### Long Essays

1. Define primary health care. List the elements of primary health care. Briefly explain the principles of primary health care. 951, 699, D01, D05, J13
2. Define primary health care. What are its components? Describe how primary health care is provided to rural areas in India. 951, 699, 701, J07, D08
3. Define primary health care. Write about staffing pattern and functioning of primary health center (PHC). 951, 699, 703, J14
4. Explain the concept of primary health care in India. List the functions of a primary health center. 958, 699, 704, D00, J02
5. Describe the set up and functions of a PHC. 964, 703, J08
6. What is a "community health center"? Describe how health care is delivered to a population covered by a community development block. 967, 709, D07(RS2)

### Short Essays

1. What are the determinants of primary health care? — 700, J03
2. What is the role of non-governmental organizations (NGOs) in family planning? — D10
3. Discuss briefly about various levels (three-tier system) of health-care services and in brief its 'characteristics'. 950, 699, J10(RS2), J12, D14
4. Define "primary health care". Write briefly about the "essential elements" and "guiding principles" of primary health care. 951, 699, J12(RS2), D12(RS3), D14(RS3), J17(RS3), J18(RS3), J01, D02, D03, J04, D04, J11, D11, D12, D14, J17

5. Write the components of primary health care with examples. 951, 700, D03
6. What is "appropriate technology"? 952, 701, J07
7. Describe "ASHA's role and responsibilities under National Rural Health Mission. 959, 726, D12(RS3), J19(RS3)
8. Traditional birth attendant (Dai). 960, 702, D06
9. Subcenter—health-care activities. 961, 703, D01
10. Functions of a primary health center. 964, 704, J03, J04, J05, D16
11. IPHS standards for staff pattern at primary health centre. 967, 703, J19(RS3)
12. Describe a community health center—functions. 967, 709, D11(RS2), D03, D10
13. Duties of medical officer in primary health center. 970, 706, J09
14. Job description of multipurpose health worker (female). 971, 707, D07(RS2), J09(RS2), J12(RS2), D13(RS3), D14(RS3), J05, D11
15. Job responsibilities of health workers (male). 973, 707, J10, J14
16. Enumerate functions of health assistant (male). 975, 708, D09
17. Central Government Health Scheme. 977, 710, D18(RS3)
18. Name the three health schemes, which offers health insurance. 977, 208, J04
19. Indigenous system of medicine. 978, 710, J18(RS3)
20. Voluntary health agencies in India—define, enumerate and functions. 978, 756, D11(RS2), D13(RS3), D00, J02
21. Briefly describe the role of NGOs in health care (non-governmental organization). 978, 756, D10(RS2)
22. Write in short about Indian Red Cross (activities). 978, 768, D00, J10

### Short Answers

1. Role of village health guides. — 701, D02, D05



	PARK	SYKNT	
2. How training of local dais is given?	—	702	J10(RS2)
3. What is the duration of training of a local dai? What does she learn during her training?	—	702	J11(RS2)
4. AYUSH in health-care services for the community.	—	710	J08(RS2)
5. Write any voluntary organization working for de-addiction in India.	—	—	J11
6. 'Medical care' versus 'health care'	950	699	D15
7. Describe the different levels of health-care delivery system in India.	950	699	D14(RS3), D13
8. Primary health care—elements (components) and principles.	951	699	D13(RS3), J16(RS3), D16(RS3), D06, J06, J10
9. Equitable distribution.	951	700	D15
10. Define 'community participation' and give example.	951	700	J12
11. Explain the term "appropriate technology" with examples.	951	701	J07, D08, J15
12. What is HFA 2000 AD?	952	681	D00
13. Accredited social health activist (ASHA)—job responsibilities.	959	726	J09(RS2), J17(RS3), D17(RS3)
14. Describe the functions of subcenter.	961	703	J04
15. List the ten functions of Primary health centers.	964	704	D02, J11
16. Staff pattern of PHC.	967	703	J17
17. Community health center.	967	709	D13(RS3), D17(RS3)
18. What is the role of a health worker (male) as regards malaria eradication?	973	708	D10
19. Central Government Health Scheme.	977	710	D11(RS2)
20. Indigenous system of medicine.	978	710	D07(RS2), J09(RS2)
21. Voluntary health organizations (NGOs)—enumerate (any six operating in India), role in health care.	978	756	D09(RS2), J18(RS3), J01, D06, J12

	PARK	SYKNT	
22. Indian Red Cross Society—activities.	978	768	D18(RS3), D11

  

<b>CHAPTER 23</b>			
<b>INTERNATIONAL HEALTH</b>			
<b>Short Essays</b>			
1. Write briefly on World Food Day.	—	—	D11
2. World Health Organization (WHO) - functions/responsibilities.	982	760	J09(RS2), D11(RS2), J13(RS3), D14(RS3), D00, J02, D16
3. World Health Day (Theme 2012/2014).	982	760	J12
4. Role of World Health Organization in fields of biomedical research.	983	762	J02
5. Enumerate the international donor agencies and mention the activities of UNICEF in India.	985	763	J03, J11
6. Expand UNICEF. Describe activities of UNICEF (United Nations Children's Fund) in India—in child nutrition/Child health/improving child survival.	985	763	J08(RS2), J10(RS2), D12(RS3), J16(RS3), J19(RS3), J01, D01, D02, D04, J06, D12, J13, D13

  

7. Add a note on the United Nations Development Program.	986	764	D09
8. Food and agriculture organization (FAO).	986	764	D16(RS3)
9. Bilateral health agencies.	986	766	D18(RS3)
10. International Red Cross Society.	988	768	J08, J15

  

<b>Short Answers</b>			
1. World Health Day (2003).	982	760	J04
2. List the activities of WHO.	983	761	D00, D02, D07
3. WHO role in disease control.	983	761	D05



Contd..

	PARK	SYKNT	
4. WHO—its role in health promotion.	983	761	J05
5. World WHO regions and their headquarters.	984	760	J19(RS3), J02
6. Enumerate functions of UNICEF.	985	763	D10(RS2)
7. UNICEF—its role in child survival.	985	763	D03
8. Expand GOBI (G O B I F F F).	985	764	D01, D04
9. Write briefly on FAO (food and agriculture organization)—four aims.	986	764	J08
10. List three purpose for which International Labor Organization (ILO) was established.	986	764	J01
11. The Colombo Plan.	987	766	D18(RS3)
12. Activities of SIDA in India.	987	766	J11
13. Role of DANIDA in India.	987	766	J12
14. Rockefeller foundation.	987	767	J09(RS2), J14
15. CARE (functions in India).	987	768	J06, J09, D16
16. International red cross society—activities/contribution.	988	768	J13(RS3), D15(RS3), D01, D04

### MISCELLANEOUS

#### Short Essays

1. Ring immunisation. — — D13(RS3)
2. Benefits of forming self-help groups of mothers in villages. — — J08(RS2)
3. What are the main health problems of urban slum dwellers and factors contributing to it? — — J08(RS2)
4. Vaccination for international travelers. — 275 D07(RS2)

#### Short Answers

1. Focus group discussion (FGD). — — J15(RS3), D16(RS3)
2. Screening for diseases in blood bank. — — D07(RS2)
3. List the demographic processes. — — D07

Contd..

	PARK	SYKNT	
4. Slow viral diseases.	—	—	D07
5. Attrition.	—	—	J11(RS2)
6. Institute.	—	—	J11(RS2)
7. Case definition for malaria.	—	—	D13(RS3)
8. What are the guidelines for defining "at-risk" groups?	—	—	J15(RS3), D13
9. Three measures of aging in a population.	—	—	D16
10. Universal barrier precautions.	—	432	D07(RS2)
11. Enumerate functions of a manager.	—	738	D10(RS2)

Contd..